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SHARP 21L-FG1L SERVICE MANUAL

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SHARP SERVICE MANUAL

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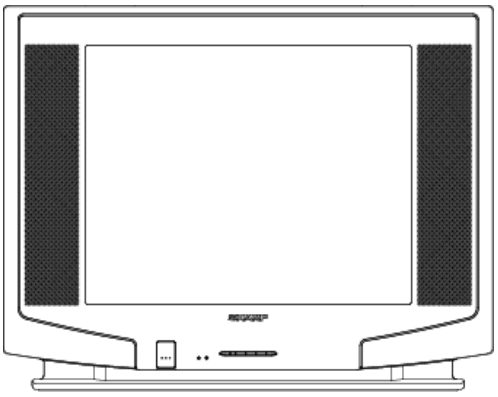

COLOUR TELEVISION
Chassis No. GA6

MODEL 21L-FG1L

In the interests of user safety (Required by safety regulations in some countries) the set should be restored to its original condition and only parts indentical to those specified should be used.

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ELECTRICAL SPECIFICATIONS

POWER INPUT.....AC 110-220 V, 50/60 Hz
POWER RATING 85W
PICTURE SIZE .....1,239 cm^2(192sq inch)
CONVERGENCE ..... Magnetic
SWEEP DEFLECTION .... Magnetic
FOCUS ..... Electrostatic
INTERMEDIATE FREQUENCIES
Picture IF Carrier Frequency ..... 45.75 MHz
Sound IF Carrier Frequency ..... 41.25 MHz
Color Sub-Carrier Frequency .....42.17 MHz
(Nominal)
AUDIO POWER
OUTPUT RATING... ..... 3.0 W(RMS) x 2pcs

SPEAKER
SIZE ..... 2" X 3.5", 2pcs
VOICE COIL IMPEDANCE .....16 ohm at 400 Hz
ANTENNA INPUT IMPEDANCE
VHF/UHF .....75 ohm Unbalanced
TUNING RANGES
VHF-Channels ..... 2 thru 13
UHF-Channels .....14 thru 69
CATV Channels ..... 1 thru 125
(EIA, Channel Plan U.S.A.)

Specifications are subject to change without prior notice.

SHARP CORPORATION

This document has been published to be used for after sales service only.
The contents are subject to change without notice.

CHAPTER 1. IMPORTANT SERVICE SAFETY PRECAUTION

[1] IMPORTANT SERVICE SAFETY PRECAUTION

IMPORTANT SERVICE SAFETY PRECAUTION

■ **Service work should be performed only by qualified service technicians who are thoroughly familiar with all safety checks and the servicing guidelines which follow:**

WARNING

1. For continued safety, no modification of any circuit should be attempted.
2. Disconnect AC power before servicing.
3. Semiconductor heat sinks are potential shock hazards when the chassis is operating.
4. The chassis in this receiver has two ground systems which are separated by insulating material. The non-isolated (hot) ground system is for the B+ voltage regulator circuit and the horizontal output circuit. The isolated ground system is for the low B+ DC voltages and the secondary circuit of the high voltage transformer.
   To prevent electrical shock use an isolation transformer between the line cord and power receptacle, when servicing this chassis.

SERVICING OF HIGH VOLTAGE SYSTEM AND PICTURE TUBE

When servicing the high voltage system, remove the static charge by connecting a 10k ohm resistor in series with an insulated wire (such as a test probe) between the picture tube ground and the anode lead. (AC line cord should be disconnected from AC outlet.)

1. Picture tube in this receiver employs integral implosion protection.
2. Replace with tube of the same type number for continued safety.
3. Do not lift picture tube by the neck.
4. Handle the picture tube only when wearing shatterproof goggles and after discharging the high voltage anode completely.

X-RADIATION AND HIGH VOLTAGE LIMITS

1. Be sure all service personnel are aware of the procedures and instructions covering X-radiation. The only potential source of X-ray in current solid state TV receivers is the picture tube. However, the picture tube does not emit measurable X-Ray radiation, if the high voltage is as specified in the "High Voltage Check" instructions.
   It is only when high voltage is excessive that X-radiation is capable of penetrating the shell of the picture tube including the lead in the glass material. The important precaution is to keep the high voltage below the maximum level specified.
2. It is essential that servicemen have available at all times an accurate high voltage meter.
   The calibration of this meter should be checked periodically.
3. High voltage should always be kept at the rated value –no higher. Operation at higher voltages may cause a failure of the picture tube or high voltage circuitry and;also, under certain conditions, may produce radiation in exceeding of desirable levels.
4. When the high voltage regulator is operating properly there is no possibility of an X-radiation problem. Every time a color chassis is serviced, the brightness should be tested while monitoring the high voltage with a meter to be certain that the high voltage does not exceed the specified value and that it is regulating correctly.
5. Do not use a picture tube other than that specified or make unrecommended circuit modifications to the high voltage circuitry.
6. When trouble shooting and taking test measurements on a receiver with excessive high voltage, avoid being unnecessarily close to the receiver.
   Do not operate the receiver longer than is necessary to locate the cause of excessive voltage.

IMPORTANT SERVICE SAFETY PRECAUTION

(Continued)

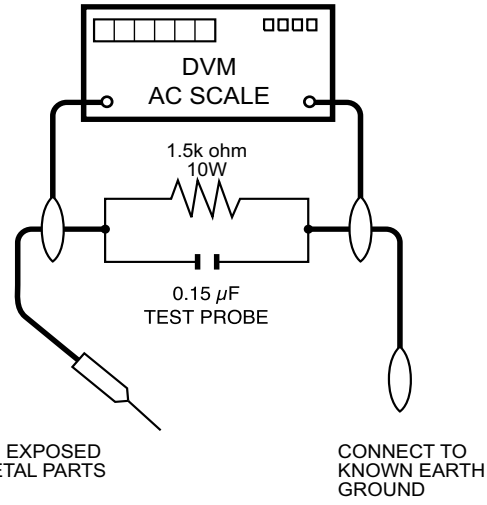
BEFORE RETURNING THE RECEIVER

(Fire & Shock Hazard)

Before returning the receiver to the user, perform the following safety checks.

1. Inspect all lead dress to make certain that leads are not pinched or that hardware is not lodged between the chassis and other metal parts in the receiver.
2. Inspect all protective devices such as non-metallic control knobs, insulating materials, cabinet backs, adjustment and compartment covers or shields, isolation resistor-capacity networks, mechanical insulators, etc.
3. To be sure that no shock hazard exists, check for leakage current in the following manner.

- Plug the AC cord directly into a 110~220 volt AC outlet, (Do not use an isolation transformer for this test).
- Using two clip leads, connect a 1.5k ohm, 10 watt resistor paralleled by a 0.15μF capacitor in series with all exposed metal cabinet parts and a known earth ground, such as electrical conduit or electrical ground connected to earth ground.
- Use an AC voltmeter having with 5000 ohm per volt, or higher, sensitivity to measure the AC voltage drop across the resistor.
- Connect the resistor connection to all exposed metal parts having a return to the chassis (antenna, metal cabinet, screw heads, knobs and control shafts, escutcheon, etc.) and measure the AC voltage drop across the resistor.
  AII checks must be repeated with the AC line cord plug connection reversed. (If necessary, a non-polarized adapter plug must be used only for the purpose of completing these check.)
  Any current measured must not exceed 0.5 milliamp.
  Any measurements not within the limits outlined above indicate of a potential shock hazard and corrective action must be taken before returning the instrument to the customer.



SAFETY NOTICE

Many electrical and mechanical parts in television receivers have special safety-related characteristics. These characteristics are often not evident from visual inspection, nor can protection afforded by them be necessarily increased by using replacement components rated for higher voltage, wattage, etc.
Replacement parts which have these special safety characteristics are identified in this manual; electrical components having such features are identified by "⚠" and shaded areas in the Replacement Parts Lists and Schematic Diagrams.

For continued protection, replacement parts must be identical to those used in the original circuit. The use of substitute replacement parts which do not have the same safety characteristics as the factory recommended replacement parts shown in this service manual, may create shock, fire, X-radiation or other hazards.

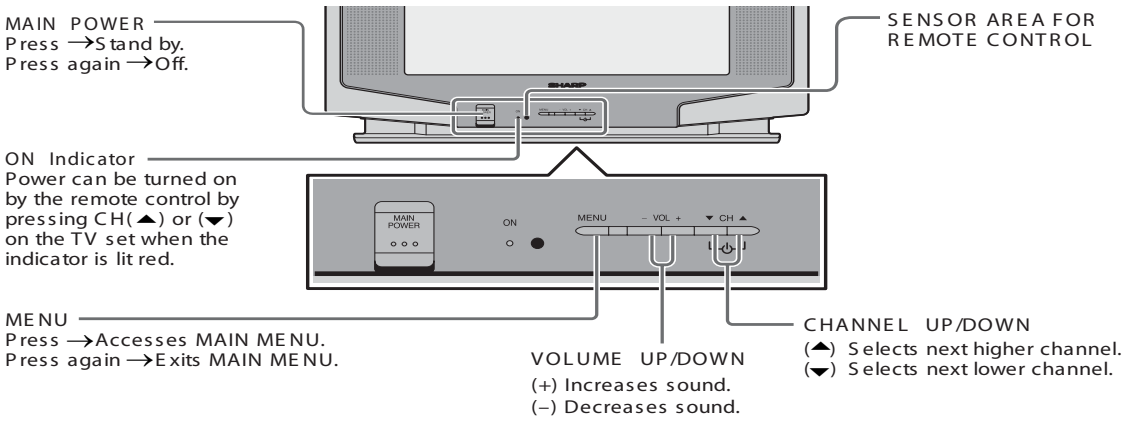
CHAPTER 2. LOCATION OF USER'S CONTROL

[1] LOCATION OF USER'S CONTROL

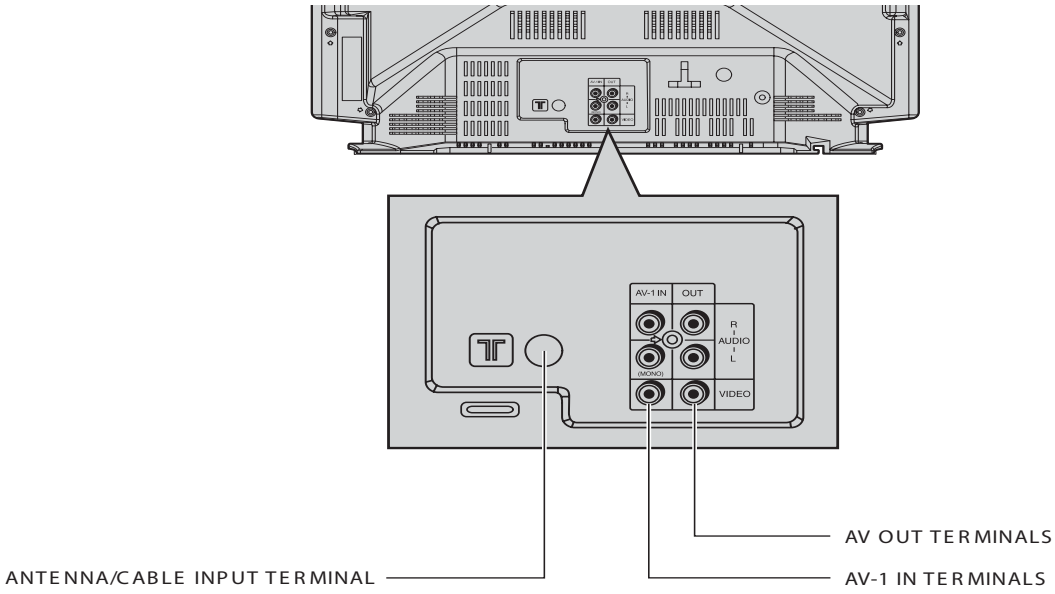
Quick Reference Control Operation

Location of Controls

Front Panel


MAIN POWER
Press →Stand by.
Press again →Off.
SENSOR AREA FOR REMOTE CONTROL
ON Indicator
Power can be turned on by the remote control by pressing CH(▲) or (▼) on the TV set when the indicator is lit red.
MAIN POWER
ON
MENU
– VOL +
▼ CH ▲
MENU
Press →Accesses MAIN MENU.
Press again →Exits MAIN MENU.
VOLUME UP/DOWN
(+) Increases sound.
(–) Decreases sound.
CHANNEL UP/DOWN
(▲) Selects next higher channel.
(▼) Selects next lower channel.

Rear Panel



CHAPTER 3. INSTALLATION AND SERVICE INSTRUCTIONS

[1] INSTALLATION AND SERVICE INSTRUCTIONS

INSTALLATION AND SERVICE INSTRUCTIONS

Note: (1) When performing any adjustments to resistor controls and transformers use non-metallic screwdrivers or TV alignment tools.
(2) Before performing adjustments, the TV set must be on at least 15 minutes.

CIRCUIT PROTECTION

The receiver is protected by a 3.15A fuse (F701), mounted on PWB-A, wired into one side of the AC line input.

X-RADIATION PROTECTOR CIRCUIT TEST

After service has been performed on the horizontal deflection system, high voltage system, B+ system, test the X-Radiation protection circuit to ascertain proper operation as follows:

1. Apply 110~220V AC using a variac transformer for accurate input voltage.
2. Allow for warm up and adjust all customer controls for normal picture and sound.
3. Receive a good local channel.
4. Connect a digital voltmeter to C602 +ve Terminal and make sure that the voltmeter reads 20±1.1V.
5. Apply external 27V DC at C602 +VE Terminal by using an external DC supply, TV must shut off.
6. To reset the protector, unplug the AC cord and remove external 27V DC at C602 +VE Terminal. Now make sure that normal picture appears on the screen.
7. If the operation of the horizontal oscillator does not stop in step 5, the circuit must be repaired before the set is returned to the customer.

HIGH VOLTAGE CHECK

High voltage is not adjustable but must be checked to verify that the receiver is operating within safe and efficient design limitations as specified checks should be as follows:

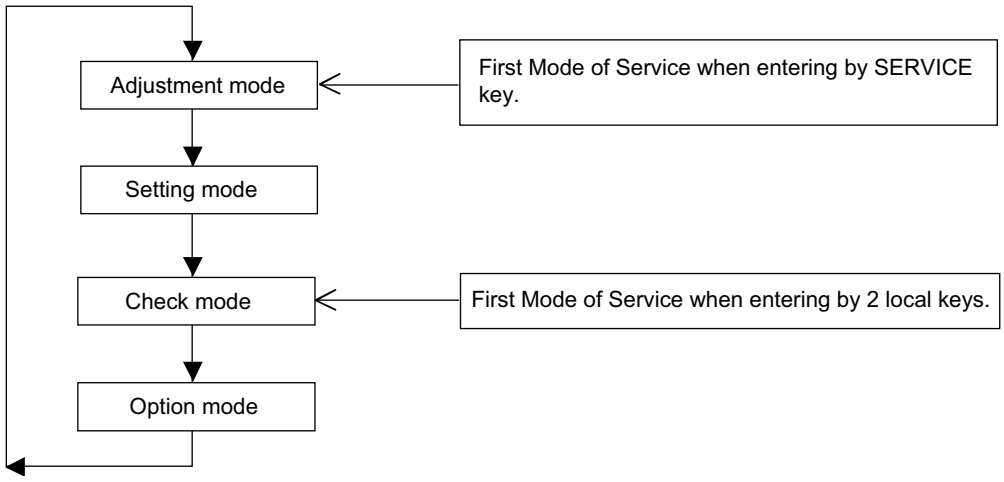
1. Connect an accurate high voltage meter between ground and anode of picture tube.
2. Operate receiver for at least 15 minutes at 110~220V AC line voltage, with a strong air signal or a properly tuned in test signal.
3. Enter the service mode and set Y-mute ON by using Service R/C.
4. The voltage should be approximately 28KV (at zero beam).
   If a correct reading cannot be obtained, check circuitry for malfunctioning components. After the voltage test, make Y-mute off to the normal mode.

CHAPTER 4. SERVICE MODE

[1] SERVICE MODE

SERVICE MODE

1. Service mode is switched by SERVICE key, CH UP + VOL DOWN when reset.
2. Service mode is cancelled by SERVICE key during service mode.
3. Service mode can be switched to the following 4 modes via MENU key;


Adjustment mode
First Mode of Service when entering by SERVICE key.
Setting mode
Check mode
First Mode of Service when entering by 2 local keys.
Option mode

4. During Service mode, AFT operation is prohibited. The setting data for PLL is always set to f_o data.
5. During Service mode, the following user data are set to default value and stored as last memory.
   PICTURE/TINT/COLOR/BRIGHT/SHARP/COLOR TEMP.(FAV.COLOR)
   BASS/TREBLE/BALANCE/MTS/FAO/SPEAKER/ENERGY SAVE/VIEW TIMER
6. During Service mode, OSD display for ON/OFF is toggled via [CH CALL] key.
   - At display OFF condition, if changing adjustment data, channel, input source, it remains display OFF.
   - At display OFF condition, if changing adjustment item, it returns to display ON.
7. During Service mode, the following operation are prohibited.
   CLOSED CAPTION/No signal BLUE SCREEN/AUTO INPUT
8. During Service mode, sound is muted except when selecting the following items.
   V23, M01~M06

Memory Map Data

Caution: to get into the service mode, one of the ways is press direct key for service items.

There is three stage of Service Mode data
First stage data from V01 ~ M06
to go into second stage of service mode data, press MENU key
Second stage data from F01 ~ F101
to go into third stage of service mode data, press MENU key
Third stage data from O01 ~ O34

Below is the contents of these data

First Stage				
Data	Service Mode	Function	Range	Default Data
V01	SUB-PICTURE	CONTRAST	0~127	127
V02	SUB-TINT	TINT	0~127	64
V03	SUB-COLOR	COLOR	0~127	64
V04	SUB-BRIGHT	BRIGHT	0~255	128
V05	SUB-SHARP	VIDEO-TONE	0~63	38
V06	V-SHIFT	V-SHIFT	0~7	1
V07	H-SHIFT	H-PHASE	0~31	20
V08	RF-AGC	RF-DELAY	0~127	64
V09	V-SIZE	V-SIZE	0~63	29
V10	V-SHIFT50	V-SHIFT(OFFSET)	-7~+7	0
V11	H-SHIFT50	H-PHASE(OFFSET)	-15~+15	0
V12	V-SIZE50	V-SIZE(OFFSET)	-31~+31	0
V13	PIF-VCO	VIF-VCO	0~63	40
V14	R-CUTOFF	R-CUTOFF	0~255	127
V15	G-CUTOFF	G-CUTOFF	0~255	127
V16	B-CUTOFF	B-CUTOFF	0~255	127
V17	R-DRIVE	R-DRIVE	0~127	64
V18	B-DRIVE	B-DRIVE	0~127	64
V19	SUB-COLOR(YUV)	COLOR	0~127	64
V20	SUB-TINT(YUV)	BASEBAND-TINT	0~127	64
V21	CC-POS	CC-POS	0~255	32
V22	SCREEN CUT OFF	CUT OFF	0~2	0
V23	SUB-VOL	A-ATT	0~127	127
V24	H-VCO	H-VCO	0~7	4
V25	S-TRAP	S-TRAP FINE ADJ	0~15	0
V26	VS-CORRECT	VS-CORRECTION	0~63	36
V27	VS-CORRECT OFFSET	VS-CORRECTION	-13~+13	0
V28	V LINEARITY	V-LINEARITY	0~63	13
V29	V LINEARITY OFFSET	V-LINEARITY	-13~+13	0
M01	MTS-ATT	ATT (MTS)	0~15	9
M02	MTS-VCO	VCO (MTS)	0~63	32
M03	MTS-FILTER	FILTER (MTS)	0~63	28
M04	MTS-WIDEBAND	WIDEBAND (MTS)	0~63	40
M05	MTS-SPECTRAL	SPECTRAL (MTS)	0~63	17
M06	SUB-VOL	VOL (MTS)	0~63	63

Auto Adjustment Item
1. H-VCO
2. RF-AGC
3. PIF-VCO

Second Stage

Data	Service Mode	Function	Range	Setting Data
F01	SHPG	V-TONE	0/1	0
F02	SHPG-P	V-TONE	0/1	0
F03	SHPG-N3	V-TONE	0/1	0
F04	ABCL	ABCL	0/1	0
F05	BS	BS-OFF	0/1	0
F06	ABCL-G	ABCL-G	0/1	0
F07	SHP-AV	VIDEO-TONE(OFFSET)	-16~+16	0
F08	SHP-YUV	VIDEO-TONE(OFFSET)	-16~+16	0
F09	SHP-P	VIDEO-TONE(OFFSET)	-31~+31	0
F10	SHP-N3	VIDEO-TONE(OFFSET)	-31~+31	0
F11	RGB-CLIP	EXTRGB-CLIP	0/1	0
F12	E-SAVE	CONTRAST(OFFSET)	0~63	30
F13	FAO-VOL	A-ATT	0~127	120
F14	PIF-G	VIF-GAIN	0~7	4
F15	Y-DELAY(TV)	Y-DELAY	0~7	5
F16	Y-DELAY(AV-P)	Y-DELAY	0~7	5
F17	Y-DELAY(TV-N3)	Y-DELAY	0~7	3
F18	Y-DELAY(AV)	Y-DELAY	0~7	5
F19	Y-DELAY(AV-P)	Y-DELAY	0~7	5
F20	Y-DELAY(AV-N3)	Y-DELAY	0~7	5
F21	Y-DELAY(YUV)	Y-DELAY	0~7	0
F22	TINT-AV	TINT(OFFSET)	-32~+32	-1
F23	COL-AV	COLOR(OFFSET)	-32~+32	+2
F24	COL-P	COLOR(OFFSET)	-31~+31	+24
F25	COL-N3	COLOR(OFFSET)	-31~+31	0
F26	R-DRI(R2)	R-DRI(OFFSET)	-32~+32	+8
F27	R-DRI(R)	R-DRI(OFFSET)	-32~+32	+3
F28	R-DRI(B)	R-DRI(OFFSET)	-32~+32	-2
F29	B-DRI(R2)	B-DRI(OFFSET)	-32~+32	-18
F30	B-DRI(R)	B-DRI(OFFSET)	-32~+32	-8
F31	B-DRI(B)	B-DRI(OFFSET)	-32~+32	+6
F32	V-FREE	V-FREE	0/1	1
F33	GAMMA	GAMMA	0~3	1
F34	H-FREE	H-FREE	0/1	0
F35	1W(TV)	V.WINDOW	0/1	0
F36	1W(AV)	V.WINDOW	0/1	1
F37	YLPF	YSW-LPF	0/1	0
F38	BS-D	BS-DISCHARGE	0~3	0
F39	BS-C	BS-CHARGE	0~3	0
F40	SL(TV)	S-SLICE DOWN	0~7	2
F41	SL(AV)	S-SLICE DOWN	0~7	2
F42	SL(YUV)	S-SLICE DOWN	0~7	0
F43	AFC2	AFC2-G	0/1	0
F44	VD(TV)	VSYNC-DET	0~3	3
F45	VD(AV)	VSYNC-DET	0~3	2
F46	VD(YUV)	VSYNC-DET	0~3	0
F47	AS(TV)	AUTO-SLICE	0/1	1
F48	AS(AV)	AUTO-SLICE	0/1	1
F49	AS(YUV)	AUTO-SLICE	0/1	0
F50	FBP(TV)	FBP VTH	0/1	0
F51	FBP(AV)	FBP VTH	0/1	0
F52	FBP(YUV)	FBP VTH	0/1	0
F53	C.CLIP LEVEL	C.CLIP LEVEL	0/1	0
F54	PSW	PSW	0/1	0
F55	FAO-VOL	VOL	0~63	58
F56	CP	CHARGE PUMP	0/1	1
F57	CC LEVEL	CC LEVEL	0~31	0
F58	OSD POS-H	OSD POS	0~31	0
F59	OSD POS-V50	OSD POS	1~55	38
F60	OSD POS-V60	OSD POS	1~50	23
F61	OFFSET-ADJ-COL	COLOR	-32~+32	+14
F62	OFFSET-ADJ-TINT	TINT	-32~+32	0

F63	OFFSET-ADJ-TINT-YUV	BASEBAND-TINT	-32~+32	0
F64	WAIT MD TIME	(SLOW MODE)	0/1	1
F65	R-CUT-YUV	R-CUT(OFFSET)	-63~+63	0
F66	G-CUT-YUV	G-CUT(OFFSET)	-63~+63	0
F67	B-CUT-YUV	B-CUT(OFFSET)	-63~+63	0
F68	R-DRI-YUV	R-DRI(OFFSET)	-63~+63	0
F69	B-DRI-YUV	B-DRI(OFFSET)	-63~+63	0
F70	CONTRAST OFFSET	CONTRAST (OFFSET)	-63~+63	0
F71	CONTRAST YUV OFFSET	CONTRAST (OFFSET)	-63~+63	0
F72	ＢＲＩＧＨＴ OFFSET	ＢＲＩＧＨＴ(OFFSET) [0Ah	-63~+63	0
F73	BRIGHT AV2 OFFSET	ＢＲＩＧＨＴ(OFFSET) [0Ah	-15~+15	+1
F74	BRIGHT YUV OFFSET	ＢＲＩＧＨＴ(OFFSET) [0Ah	-63~+63	0
F75	TRAP	TRAP-FINE 0~3		2
F76	TRAP-P	TRAP-FINE 0~3		2
F77	TRAP-N3	TRAP-FINE 0~3		2
F78	AFC1-Gain-TV	AFC1-G AFC1 Gain Up 2	0~3	0
F79	AFC1-Gain-AV	AFC1-G AFC1 Gain Up 2	0~3	3
F80	AFC1-Gain-YUV	AFC1-G AFC1 Gain Up 2	0~3	3
F81	OM-DET	OM-Det 0/1		0
F82	ＢＳ－Ｇａｉｎ	BS-Gain 0/1		0
F83	C-ANGLE	C.ANGLE	0/1	0
F84	V-AGC	V AGC	0/1	0
F85	V-STD-TV	V STD DETOFF	0/1	0
F86	V-STD-AV	V STD DETOFF	0/1	0
F87	V-STD-YUV	V STD DETOFF	0/1	0
F88	HALF-H KILLER	HALF-H KILLER	0/1	1
F89	Ｖ－ＤＬ	V-DL Fine	0~3	0
F90	Ｕ－ＤＬ	U-DL Fine	0~3	0
F91	CTI Adj	CTI	0/1	1
F92	MCUVOUT	MCU VOUT	0/1	0
F93	AS-SPEED-DN	AS-SPEED-DN	0/1	0
F94	AS-SPEED-UP	AS-SPEED-UP	0/1	0
F95	CR-PEDESTEL-ADJ	Cr Pedestal Adj.	0~15	8
F96	CB-PEDESTEL-ADJ	Cb Pedestal Adj.	0~15	8
F97	SIF-BPF-WIDE	SIF BPF WIDE	0~3	1
F98	COL-SYSTEM	COL-SYSTEM	0: 11XX (AUTO) 1: 0011 (PAL-M) 2: 0111 (PAL-N) 3: 0110 (N358)	3
F99	Pow-Storage		0/1	1
F100	SIF45 GAIN DOWN	SIF45 GAIN DOWN	0/1	1
F101	S-TRAP OFF	S-Trap	0/1	1

Third stage				
Data	OPTION FUNCTION	DATA = " 0"	DATA =" 1"	Setting Data
O01	DEMO	DEMO DISABLE	ENABLE	1
O02	DOWNLOAD	V-CHIP OP DISABLE	ENABLE	0
O03	V-CHIP	V-CHIP DISABLE	ENABLE	0
O04	SPEAKER	SPEAKER DISABLE	ENABLE	1
O05	FAO	FAO DISABLE	ENABLE	1
O06	P.PREF	P.REF DISABLE	ENABLE	0
O07	UNIV+	UNIV+ DISABLE	ENABLE	0
O08	VIEW TIMER	VIEW TIMER DISABLE	ENABLE	1
O09	EZ-SETUP	EZ-SETUP	AUTO PRESET	0
O10	* PON-CH	POWER-ON DISABLE	ENABLE	1
O11	FAV-COL	FAV-COL	COL-TEMP	1
O12	COMPONENT	COMPONENT DISABLE	ENABLE	0
O13	AV	AV DISABLE	ENABLE	1
O14	AV2	AV1	AV2	0
O15	MTS	MTS DISABLE	ENABLE	1
O16	TONE-CTRL	S-ADJ DISABLE	ENABLE	1
O17	AUTO-OFF	AUTO-OFF DISABLE	ENABLE	1
O18	LAST POWER	STANDBY MODE	POWER OFF CH	0
O19	SETUP-FLAG	NO SET UP	AUTO SET UP	1
O20	AV-FR	"0"=NO AV "1"=REAR "2"=FRONT "3"=REAR & FRONT		1
O21	AV3/S-IN	AV3/S-IN DISABLE	ENABLE	0
O22	COMB	COMB DISABLE	ENABLE	0
O23	AUTO-INPUT	AUTO-INPUT DISABLE	ENABLE	0
O24	CLOCK	CLOCK DISABLE	ENABLE	0
O25	LED	SEMEX MODEL	SPC MODEL	1
O26	FLAT	FLAT DISABLE	ENABLE	1
O27	BASS BOOST	BASS BOOST DISABLE	ENABLE	0
O28	DSE	DSE DISABLE	ENABLE	0
O29	SRS	SRS DISABLE	ENABLE	0
O30	WHITE-OUT	WHITE-OUT DISABLE	ENABLE	0
O31	FORCE-COL	Disable	Enable	0
O32	H-SYNC JUDGE	Disable	Enable	1
O33	INIT-LANG	ENGLISH SPANISH PORTUGUESE	0 1 2	1
O34	LANG-SEL	Bit 0: Spanish Bit 1: French Bit 2: Portuguese	Range: 1 … 7	1

* POWER ON BY CH-UP / DOWN KEY.

■ SELF ADJUSTMENT

H-VCO

1. When there is H-VCO self-adjustment key input for adjustment item H-VCO, self-adjustment is performed.
2. H-FREE(1chip) is set to 1.
3. H-OUT is set by intelligent monitor output.
4. IM input is set as TIM input.
5. H-VCO(1chip) data is changed so that the number of input pulse is 125 inside 8ms interval.
6. When adjustment completed, OSD display and H-VCO self-adjustment status data of EEPROM are updated.
7. H-FREE(1chip), intelligent monitor output and IM input mode are recovered.

RF-AGC

1. When there is RF-AGC self-adjustment key input for adjustment item RF-AGC, self-adjustment is performed.
2. AGC-OUT is set by intelligent monitor output.
3. IM input is set as AD input.
4. By decreasing RF-AGC (1chip) data from current RF-AGC adjustment value to 0, AFT input voltage becomes the maximum setting value.
5. Increase RF-AGC(1chip) data, when AFT input voltage is at (max. 0.3V) point, adjustment is completed.
6. When adjustment completed, OSD display and RF-AGC self-adjustment status data of EEPROM are updated.
7. Intelligent monitor output and IM input mode are recovered.

PIF-VCO

1. When there is PIF-VCO self-adjustment key input for adjustment item PIF-VCO, self-adjustment is performed.
2. VIF-DEF(1chip) is set to 1.
3. AFC is set by intelligent monitor output.
4. IM input is set as AD input.
5. VIF-VCO(1chip) data is changed so that input voltage becomes 2.5V.
6. When adjustment completed, OSD display and PIF-VCO self-adjustment status data of EEPROM are updated.
7. VIF-DEF(1chip), intelligent monitor output and IM input mode are recovered.

CHAPTER 5. ADJUSTMENT METHOD

[1] ADJUSTMENT METHOD

MODEL NAME	21L-FG1L		
ADJUSTMENT ITEM	**OPTION SET UP**		
ADJUSTMENT POSITION	REFER AS BELOW	STEP RANGE	REFER AS BELOW
CONTROL	—		
PRE-ADJUST REQUIREMENT	—		
CONTENT	—		
INPUT CONDITION	21L−FG1L		
OUTPUT	OSD CHECKING		

ADJUSTMENT PROCEDURE

BUS OPTION FOR THIRD STAGE SERVICE DATA

FUNCTION	O01 DEMO	O02 DOWNLOAD	O03 V-CHIP	O04 SP	O05 FAO	O06 P.PREF	O07 UNIV+	O08 VIEW	O09 EZ	O10 PON-CH
21L-FG1L	1	0	0	1	1	0	0	1	0	1
DEF	**"0"= DISABLE**						**"1"=ENABLE**			
	009 --> "0"= EZ-SETUP "1"= AUTO PRESET									

BUS OPTION FOR THIRD STAGE SERVICE DATA

FUNCTION	O11 FAV-COL	O12 COMP	O13 AV	O14 AV2	O15 MTS	O16 TONE	O17 AUTO	O18 Last Pow	O19 SETUP	O20 AV-FR
21L-FG1L	1	0	1	0	1	1	1	0	1	1

FUNCTION	O21 AV3	O22 COMB	O23 A-IN	O24 CLOCK	O25 LED	O26 FLAT	O27 BASS	O28 DSE	O29 SRS	O30 WHITE
21L-FG1L	0	0	0	0	1	1	0	0	0	0

FUNCTION	O31 FORCE COL	O32 H-SYNC	O33 INITIAL LAN	O34 LANG-SEL				
21L-FG1L	0	1	1	1				
DEF	O11 --> "0" =FAV-COL "1"= COL-TEMP O33 --> "0"= ENGLISH "1"= SPANISH "2"=PORTUGUESE O19--> "0"= NO SET UP "1" = AUTO SETUP O20--> "0"=NO AV "1"=REAR "2"=FRONT "3"=REAR&FRONT O25--> "0"= SEMEX SPEC "1" = SPC SPEC O34--> "1" ENGLISH + SPANISH							

HISTORY OF REVISION	SYMBOL	REVISED CONTENT .

MODEL NAME	21L-FG1L		
ADJUSTMENT ITEM	**BUS SET UP**		
ADJUSTMENT POSITION	REFER AS BELOW	STEP RANGE	REFER AS BELOW
CONTROL	—		
PRE-ADJUST REQUIREMENT	—		
CONTENT	—		
INPUT CONDITION	21L-FG1L		
OUTPUT	OSD CHECKING		

ADJUSTMENT PROCEDURE

DATA SETUP FOR FIRST AND SECOND STAGE SERVICE DATA

FUNCTION	V05 SHARP	V25 S-TRAP	V26 VS COR	V28 V-LIN	F14 PIF-G)	F17 Y-DELAY (TY-N3)	F22 TINT-AV
21L-FG1L	38	0	37	9	4	3	-1
DEF							

FUNCTION	F23 COLOR-AV	F61 OFFSET ADJ COL	F62 OFFSET ADJ TINT	F100 SIF45 GAIN DOWN	F58 OSD POS-H
21L-FG1L	+2	+14	2	1	5
DEF					

HISTORY OF REVISION	SYMBOL	REVISED CONTENT .

MODEL NAME	21L-FG1L		
ADJUSTMENT ITEM	**H-POSITION**		
ADJUSTMENT POSITION	V07	STEP RANGE	0-31
CONTROL	I2C BUS CONTROL		
PRE-ADJUST REQUIREMENT	OPTION SET UP, BUS SET UP,CRT-PURITY		
CONTENT	US 4 CH LION HEAD (MONOSCOPE)		
INPUT CONDITION	AC 220V, US MAGNETIC FIELD		
OUTPUT	CONFIRMATION BY CRT SCREEN		
ADJUSTMENT PROCEDURE	1.ADJUST THE **V07** BUS DATA TO HAVE A BALANCE POSITION TO SPEC OF **A=B**. 2.IF CANNOT MAKE IT TO **A=B**, ADJ FROM THE BEST POINT SO THAT **B** SLIDELY SMALLER THAN **A** 		
	[CHECKING SPEC] LEFT AND RIGHT SYMMETRICAL		

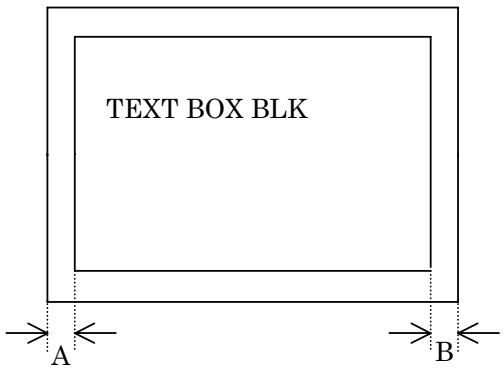
HISTORY OFREVISION	SYMBOL	REVISED CONTENT .

MODEL NAME	21L-FG1L		
ADJUSTMENT ITEM	**V-SIZE**		
ADJUSTMENT POSITION	V09	STEP RANGE	0~63
CONTROL	I2C CONTROL		
PRE-ADJUST REQUIREMENT	OPTION SET UP, BUS SET UP,CRT PURITY, V-PHASE , +B ADJUST		
CONTENT	US 4 CH LION HEAD		
INPUT CONDITION	AC 220		
OUTPUT	CONFIRMATION BY CRT SCREEN		
ADJUSTMENT PROCEDURE	ADJUST THE V09 BUS DATA UNTILL THE OVERSCAN BECOME AS SPECIFIED BELOW. CAUTION:- PLEASE AGING TV MORE THAN 10 MINUTES BEFORE ADJUSTMENT.		
	[CHECKING SPEC] OVERSCAN 10 ± 2.5%		

HISTORY OFREVISION	SYMBOL	REVISED CONTENT .

MODEL NAME	21L-FG1L		
ADJUSTMENT ITEM	**V-PHASE**		
ADJUSTMENT POSITION	V06	STEP RANGE	0-7
CONTOROL	I2C CONTROL		
PRE-ADJUST REQUIREMENT	OPTION SET UP, BUS SET UP, CRT PURITY		
CONTENT	US 4 CH LION HEAD (MONOSCOPE PATTERN)		
INPUT CONDITION	220 V, RF INPUT, ZERO MAGNETIC FIELD		
OUTPUT	CONFIRMATION ON CRT SCREEN		
ADJUSTMENT PROCEDURE	ADJUST V06 BUS DATA TO HAVE A MOST ACCEPTABLE VERTICAL POSITION. THE MONOSCOPE PATTERN SHOULD BE BALANCE IN VERTICAL POSITION **NOTE: THE DATA FOR V06 LIMIT AT <= 0**4 , **EVEN POSITION NOT GOOD ENOUGH**		
	[CHECKING CONFIRMATION]		

HISTORY OFREVISION	SYMBOL	REVISED CONTENT .

MODEL NAME	21L-FG1L		
ADJUSTMENT ITEM	**CLOSED CAPTION SET UP**		
ADJUSTMENT POSITION	V21	STEP RANGE	0 - 255
CONTROL	I2C CONTROL		
PRE-ADJUST REQUIREMENT	OPTION SET UP, BUS SET UP		
CONTENT	US 4 CH LION HEAD		
INPUT CONDITION	AC 220		
OUTPUT	CONFIRMATION ON CRT DISPLAY.		
ADJUSTMENT PROCEDURE	1)BY SELECTING THE **V21**, BOX BLK TEXT WILL BE APPEARED. 2)ADJUST THE **V21** BUS DATA TO HAVE A BALANCE POSITION TO SPEC OF A=B.  		
	[CHECKING SPEC] LEFT AND RIGHT SYMMETRICAL THEN V21 DATA REDUCE 3 STEP.		

HISTORY OFREVISION	SYMBOL	REVISED CONTENT .

MODEL NAME	21L-FG1L		
ADJUSTMENT ITEM	**H-VCO**		
ADJUSTMENT POSITION	V24	STEP RANGE	0 - 7
CONTROL	I2C CONTROL		
PRE-ADJUST REQUIREMENT	OPTION SET UP, BUS SET UP		
CONTENT	NO SIGNAL (RASTER) CONDITION		
INPUT CONDITION	AC 220		
OUTPUT	IC 801 PIN 15		
ADJUSTMENT PROCEDURE	(MANUAL ADJ) 1)GO TO SERVICE MODE, 2)GO TO SERVICE DATA **V24**, ADJ UNTIL FREQ AS BELOW (SELF ADJ) 1) GO TO SERVICE MODE, BY SELECTING THE SERVICE DATA V24 2) PRESS THE R/C TO OPERATE AUTO H-VCO, OSD APPEAR "OK" AT SCREEN 3) IF APPEAR "NG" PLS REPEAT STEP 2		
	[CHECKING SPEC] **FREQ = 15.735 ± .02 KHz**		

HISTORY OF REVISION	SYMBOL	REVISED CONTENT .

MODEL NAME	21L-FG1L		
ADJUSTMENT ITEM	**PIF-VCO**		
ADJUSTMENT POSITION	V13	STEP RANGE	0 - 63
CONTROL	I2C CONTROL		
PRE-ADJUST REQUIREMENT	OPTION SET UP, BUS SET UP		
CONTENT	NO SIGNAL (RASTER) CONDITION		
INPUT CONDITION	AC 220		
OUTPUT	CONFIRMATION ON CRT DISPLAY(AUTO), IC801 PIN 9 VOLTAGE (MANUAL).		
ADJUST PROCEDURE	(AT SELF ADJUSTMENT MODE) 1)GO INTO SERVICE MODE,BY SELECTING THE SERVICE DATA V13 2)PRESS THE R/C FOR AUTO PIF-VCO KEY, OSD APPEAR "OK" AT SCREEN 3)IF APPEAR "NG" PLS REPEAT STEP 2 (AT MANUAL ADJUSTMENT MODE) 1)GO INTO SERVICE MODE, BY SELECTING THE SERVICE DATA V13 2) ADJUST THE DATA UP/DOWN UNTIL IC801 PIN 9 VOLTAGE BECOME AS SPECIFIED BELOW		
	[CHECKING SPEC] 2.5 ± 0.5 V DC (CHECKING SPEC : 2.50 ± 1.5 V)		

HISTORY OFREVISION	SYMBOL	REVISED CONTENT .

MODEL NAME	21L-FG1L		
ADJUSTMENT ITEM	**RF-AGC**		
ADJUSTMENT POSITION	V 08	STEP RANGE	0-127
CONTROL	I2C CONTROL		
PRE-ADJUST REQUIREMENT	OPTION SET UP, BUS SET UP		
CONTENT	US10CH HALF COLOR BAR		
INPUT CONDITION	RF INPUT FIELD STRENGTH **53dB μ V**(FIX)		
OUTPUT	TUNER AGC TERMINAL (JA442 OR TP 201) OR CRT DISPLAY CONFIRMATION		
ADJUSTMENT PROCEDURE	**(AT SELF ADJUSTMENT MODE)** 1.GO TO SERVICE MODE 2.GO TO SERVICE DATA **V08**, PRESS R/C TO OPEARATE AUTO-AGC KEY AND CONFIRM THE **OK** DISPLAY ON THE SCREEN . 3.IF APPEAR NG PLS REPEAT STEP 2 AGAIN. **(AT MANUAL ADJUSTMENT MODE)** 1.ADJUST THE V08 BUS DATA UNTIL AGC TERMINAL VOLTAGE BECOME MAXIMUM, THEN DROP 0.1V BELOW MAXIMUM VOLTAGE. 2. CHANGE THE ANTENNA INPUT SIGNAL TO 63~67 dBuV, AND MAKE SURE THERE IS NO NOISE 3. CHANGE THE ANTENNA INPUT SIGNAL TO 90~95 dBuV TO BE SURE THAT THERE IS NO CROSS MODULATION BEAT.		
	[VOLTAGE CONFIRMATION] MAX - 0.1V dc		

HISTORY OFREVISION	SYMBOL	REVISED CONTENT .

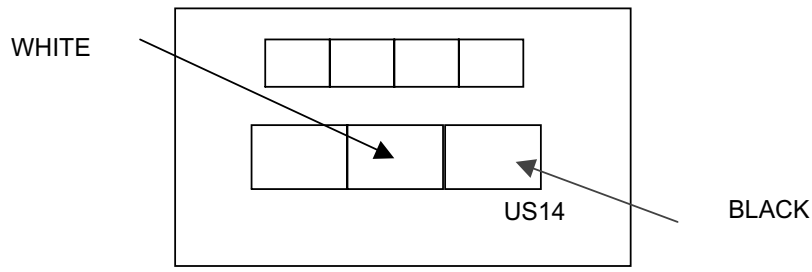
MODEL NAME	21L-FG1L		
ADJUSTMENT ITEM	**PURITY**		
ADJUSTMENT POSITION		STEP RANGE	0~255
CONTROL			
PRE-ADJUST REQUIREMENT	OPTION SET UP, BUS SET UP,ROUGH CONVERGENCE		
CONTENT	ONE COLOR (GREEN)		
INPUT CONDITION	220 V		
OUTPUT	CONFIRMATION ON CRT DISPLAY.		
ADJUSTMENT PROCEDURE	1)SELECT THE ONE COLOR (GREEN) AND ADJUST BEAM CURRENT WITH SCREEN CONTROL TO 700uA 2)DEGAUSS CRT WITH DEGAUSSING COIL 3)THE PURITY MAGNET MUST BE PREVIOUSLY SET AT THE "0" MAGNETIC FIELD AND CONVERGENCE MUST BE ADJUSTED(ROUGH). 4)WITH PURITY MAGNET ADJUST CENTER TO RANK "A". 5)ADJUST DYNAMIC PURITY BY MOVING DY BACK AND FORTH TO RANK "A". (OPTIMUM POINT) 6)TIGHTEN SCREW OF DY 7)APPLY THE ADJUSTMENT AFTER AGING MORE THAN 30 MINUTES.		
	[CAUTION POINT] SPEC : (L),(R) CPTM CRT = INSIDE 20 +/- 10um OTHER CRT = INSIDE 0 +/- 10um		

HISTORY OFREVISION	SYMBOL	REVISED CONTENT .

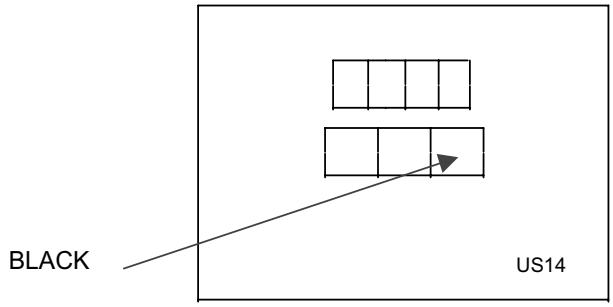
MODEL NAME	21L-FG1L		
ADJUSTMENT ITEM	**SCREEN**		
ADJUSTMENT POSITION	V14,V15,V16	STEP RANGE	0~255
CONTROL	I2C CONTROL		
PRE-ADJUST REQUIREMENT	OPTION SET UP, BUS SET UP		
CONTENT	US-4CH LION HEAD		
INPUT CONDITION	220 V		
OUTPUT	CONFIRMATION ON CRT DISPLAY.		
ADJUSTMENT PROCEDURE	1) IN SERVICE MODE, SET **V04** TO 127 AND **V14**&**V15**&**V16** TO 127; **V17**&**V18** TO 64 , GET IN Y-MUTE BY R/C AND SET **V22** TO "1", PICTURE APPEAR IN CUT-OFF CONDITION 2)ADJUST THE SCREEN SO THAT CUT-OFF LINE APPEAR IN LOW BRIGHT, THEN JUDGE THAT WHETHER THE CUT-OFF LINE APPEAR IN RED OR GREEN OR BLUE COLOR, IN THIS CONDITION V14= R-CUTOFF,V15=G-CUTOFF,V16=B-CUTOFF, FIX THE DATA OF THE COLOR APPEAR IN CUT-OFF LINE AND USE R/C TO ADJUST THE OTHER TWO CUT-OFF DATA SO THAT CUT-OFF LINE COLOR BECOME WHITE. 3)TURN THE SCREEN VR OF FBT SO THAT CUT-OFF LINE JUST DISAPPEAR AND USE R/C TO SET **V22** TO "0", NEXT DISABLE THE Y-MUTE SO THAT PICTURE APPEAR IN NORMAL MODE.		
	[VOLTAGE CONFIRMATION]		

HISTORY OFREVISION	SYMBOL	REVISED CONTENT .

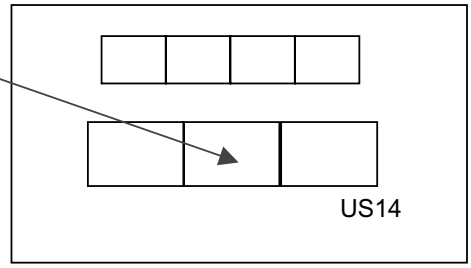
MODEL NAME	21L-FG1L		
ADJUSTMENT ITEM	**WHITE BALANCE**		
ADJUSTMENT POSITION	V17,V18,V14,V15,V16	STEP RANGE	0-127, 0~255
CONTROL	I2C BUS CONTROL		
PRE-ADJUST REQUIREMENT	OPTION SET UP, BUS SET UP, SCREEN		
CONTENT	23CH 50IRE WINDOW PATTERN		
INPUT CONDITION	220 V		
OUTPUT	CRT SCREEN DISPLAY .		
ADJUSTMENT PROCEDURE	1)**WHITE** (HIGH BEAM) FIRST LET THE GUN POINT AT **BLACK** POSITION (AS DRAWING ATTACH), ADJ **V04** UNTIL **BRIGHTNESS Y** BECOME **5 cd/m2**, THEN LET THE GUN POINT AT **WHITE** POSITION (AS DRAWING ATTACH),ADJUST **VO1** UNTIL **BRIGHTNESS Y** BECOME **150 cd/m2**, ADJUST THE BUS DATA OF **V17**(R DRIVE),**V18**(B DRIVE) UNTLL THE AXIS OF COLOUR TEMPERATURE BECOME **X=0.273,Y=0.280**. 2)**BLACK** (LOW BEAM) LET THE GUN POINT AT BLACK POSITION, IF THE VALUE SHIFTED AWAY FROM THE DATA ADJUSTED IN STEP 1), ADJUST AGAIN THE TWO SERVICE DATA WHICH HAVE CHOSEN AT SCREEN ADJUST SO THAT TO OBTAIN THE SIMILAR AXIS AS ABOVE. *__WARNING__: DO NOT DISTURB THE MINI STEP GUN DATA DURING THIS ADJUSTMENT. **REPEAT STEP 1),2) TO GET A REGULATED POSITION.		
	[CHECKING CONFIRMATION] X=0.273,Y=0.280 (11,600° K+1 MPCD)		



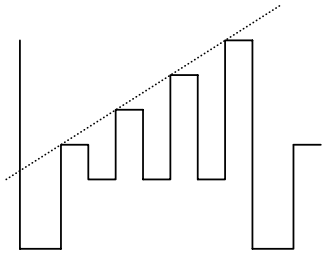
HISTORY OFREVISION	SYMBOL	REVISED CONTENT .

MODEL NAME	21L-FG1L		
ADJUSTMENT ITEM	**SUB-BRIGHT**		
ADJUSTMENT POSITION	V04	STEP RANGE	0-255
CONTROL	I2C CONTROL		
PRE-ADJUST REQUIREMENT	OPTION SET UP, BUS SET UP, SCREEN, WHITE BALANCE		
CONTENT	WINDOW PATTERN		
INPUT CONDITION	220 V		
OUTPUT	CRT SCREEN DISPLAY .		
ADJUSTMENT PROCEDURE	1)LET THE GUN POINT AT BLACK POSITION(AS ATTACH DRAWING), ADJUST **V04** BUS DATA UNTILL BRIGHTNESS Y = 0.5 cd/m2, **THEN STEP DOWN MORE 4 STEP**  		
	[VOLTAGER CONFIRMATION] BRIGHTNESS Y = 0.5 cd/m2, THEN STEP DOWN MORE 4 STEP		

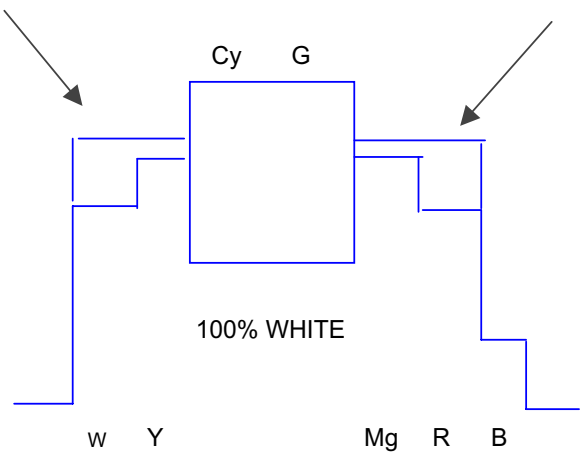
HISTORY OFREVISION	SYMBOL	REVISED CONTENT .

MODEL NAME	21L-FG1L		
ADJUSTMENT ITEM	**SUB-PICTURE**		
ADJUSTMENT POSITION	V01	STEP RANGE	0-127
CONTROL	I2C BUS CONTROL		
PRE-ADJUST REQUIREMENT	OPTION SET UP, BUS SET UP, SCREEN, WHITE BALANCE, SUB-BRIGHTNESS		
CONTENT	WINDOW PATTERN		
INPUT CONDITION	220 V		
OUTPUT	CRT SCREEN DISPLAY		
ADJUSTMENT PROCEDURE	1) LET THE GUN POINT AT WHITE POSITION (AS ATTACH DRAWING), ADJUST **V01** BUS DATA UNTILL BRIGHTNESS Y = **150 cd/m2**. **NOTE: ALLOWABLE DATA FOR V01 IS >= 90, EVEN Y CAN'T MATCH THE SPEC** WHITE  **[VOLTAGE CONFIRMATION]** BRIGHTNESS Y = 150 cd/m2		

HISTORY OFREVISION	SYMBOL	REVISED CONTENT .

MODEL NAME	21L-FG1L		
ADJUSTMENT ITEM	**SUB-TINT**		
ADJUSTMENT POSITION	V02	STEP RANGE	0-127
CONTROL	I2C CONTROL		
PRE-ADJUST REQUIREMENT	OPTION SET UP, BUS SET UP, VCO ADJ, RF-AGC		
CONTENT	US 10 CH HALF COLOR BAR PATTERN		
INPUT CONDITION	220 V		
OUTPUT	B-AMP TR BASE (JA410) CONFIRRM WITH OSCILLOSCOPE		
ADJUSTMENT PROCEDURE	1)GET IN Y-MUTE FUNCTION BY R/C . 2)ADJUST THE **V02** BUS DATA TO GET A WAVEFORM AS BELOW. 3) DISABLE THE Y-MUTE  B-AMP BASE (TP 47B)MUST BE IN STEPPING LEVEL		
	[CONFIRMATION]		

HISTORY OFREVISION	SYMBOL	REVISED CONTENT .

MODEL NAME	21L-FG1L		
ADJUSTMENT ITEM	**SUB-COLOR**		
ADJUSTMENT POSITION	V03	STEP RANGE	0-127
CONTROL	I2C BUS CONTROL		
PRE-ADJUST REQUIREMENT	OPTION SET UP, BUS SET UP, VCO ADJ, RF-AGC, **SUB-PICT, SUB-TNT**		
CONTENT	US 10 CH HALF COLOR BAR PATTERN		
INPUT CONDITION	220 V		
OUTPUT	R-AMP TR BASE (JA401) CONFIRM WITH OSCILLOSCOPE		
ADJUSTMENT PROCEDURE	1)SET THE **V03** BUS DATA TO GET A WAVEFORM AS BELOW 2)THIS WAVEFORM SHOWS THAT THE 75% WHITE & RED PORTIONS OF COLOR BAR BE AT THE SAME LEVEL  		
	[CHECKING CONFIRMATION]		

HISTORY OFREVISION	SYMBOL	REVISED CONTENT .

MODEL NAME	21L-FG1L		
ADJUSTMENT ITEM	**X-RAY PROTECTION OPERATING CONFIRMATION**		
ADJUSTMENT POSITION	—	STEP RANGE	—
CONTROL	—		
PRE-ADJUST REQUIREMENT	AFTER ALL ADJUSTMENT FINISHED.		
CONTENT	US 4 CH LION HEAD (MONOSCOPE PATTERN)		
INPUT CONDITION	AC 220V, RF INPUT		
OUTPUT	CONFIRMATION BY THE CRT		

ADJUSTMENT PROCEDURE

SET THE USER CONTROL TO SHIPMENT POSITION.

[VOLTAGE CONFIRMATION]
CHECK THE VOLTAGE OF C602 +VE TERMINAL AS SPECIFIED BELOW.

[OPERATION CONFIRMATION]
SUPPLY THE DC VOLTAGE TO C602 +VE TERMINAL AND MAKE SURE THE PROTECTOR IS FUNCTIONED , HORIZONTAL OSCILATION STOP AND PICTURE DISAPPEAR.

[RECOVER INFORMATION]
PULL OUT THE AC CORD .

[CAUTION]
FROM THE RECOVER CONFIRMATION MENTIONED ABOVE,THE AC CODE MUST BE PULLED OUT AT LEAST 4 SECOND BEFORE PLUGGING IN AGAIN. (IN ORDER TO MAKE SURE THE μ-COM HAS BEEN RESET.)

[VOLTAGE COMFIRMATION]

MODEL	TP VOLTAGE	OPERATION VOLTAGE
21L-FG1L	26 ± 1.1V DC	27V

HISTORY OFREVISION	SYMBOL	REVISED CONTENT .

MODEL NAME	21L-FG1L		
ADJUSTMENT ITEM	**HIGH VOLTAGE**		
ADJUSTMENT POSITION	–	STEP RANGE	–
CONTOROL	–		
PRE-ADJUST REQUIREMENT	AFTER ALL ADJUSTMENT FINISHED.		
CONTENT	US 4 CH LION HEAD (MONOSCOPE PATTERN)		
INPUT CONDITION	AC 220V, RF INPUT		
OUTPUT	CRT ANODE VOLTAGE		
ADJUSTMENT PROCEDURE	SET THE USER CONTROL TO SHIPMENT SETTING POSITION.PUSH ON Y - MUTE BY R/C CONFIRM THE VOLTAGE OF CRT ANODE BY HIGH VOLTAGE METER AND MAKE SURE THE READING IS AS BELOW.		

MODEL	HIGH VOLTAGE
21L-FG1L	BELOW 30kV

[CAUTION POINT]
USE ELECTROSTATIC HI-VOLTAGE METER AND FOLLOW THE UL / DHHS STANDARD TO MAKE CORRECTION AND CONTROL.

HISTORY OFREVISION	SYMBOL	REVISED CONTENT .

MODEL NAME	21L-FG1L		
ADJUSTMENT ITEM	**MS LEVEL ADJUSTMENT**		
ADJUSTMENT POSITION	M01	STEP RANGE	0~15
CONTROL	I2C BUS CONTROL		
PRE-ADJUST REQUIREMENT	OPTION SET UP, BUS SET UP, VCO ADJ, RF-AGC		
CONTENT	MONORAL SIGNAL (400HZ 100% MODULATION)		
INPUT CONDITION	AC 220V, RF INPUT		
OUTPUT	IC 3001 39 PIN		
ADJUSTMENT PROCEDURE	1) SET THE SOUND VOLUME CONTROL MORE THAN 1. 2) ADJUST BUS DATA OF **M01** UNTIL THE VOLTAGE OF 39 PIN BECOME AS SPECIFIED BELOW.		
	[CONFIRMATION VOLTAGE] 530m (+ 18m , -35m) Vrms		

HISTORY OFREVISION	SYMBOL	REVISED CONTENT .

MODEL NAME	21L-FG1L		
ADJUSTMENT ITEM	**SEPARATION ADJUSTMENT**		
ADJUSTMENT POSITION	M04,M05	STEP RANGE	0~63
CONTOROL	I2C BUS CONTROL		
PRE-ADJUST REQUIREMENT	OPTION SET UP, BUS SET UP, VCO ADJ, RF-AGC, MS-LEVEL,		
CONTENT	STEREO SIGNAL SIGNAL 1 : MODULATION 30%, L-CH ONLY, NR-ON, 300Hz SIGNAL 2 : MODULATION 30%, L-CH ONLY, NR-ON, 3kHz		
INPUT CONDITION	RF INPUT		
OUTPUT	IC 3001 39 PIN		
ADJUSTMENT PROCEDURE	1) INPUT SIGNAL 1, ADJUST BUS DATA OF **M04** UNTIL THE OF 39 PIN BECOME MINIMUM LEVEL. 2) INPUT SIGNAL 2, ADJUST BUS DATA OF **M05** UNTIL THE AC VOLTAGE OF 39 PIN BECOME MINIMUM LEVEL. 3) REPEAT STEP 1) AND 2). SET THE SOUND VOLUME TO MAXIMUM THEN MAKE SURE THE READING FROM THE SPEAKER TERMINAL MUST BE OVER THE SPEC AS SPECIFIED BELOW.		
	[CONFIRMATION] OVER 25 dB (CHECKING SPEC : OVER 20 dB)		

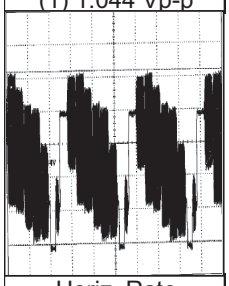
HISTORY OFREVISION	SYMBOL	REVISED CONTENT .

CHAPTER 6. WAVEFORMS

[1] WAVEFORMS

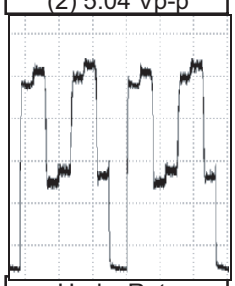
WAVEFORMS

(1) 1.044 Vp-p



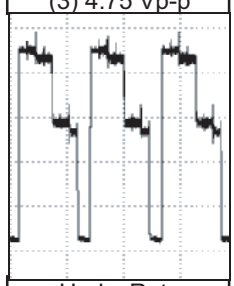
Horiz. Rate

(2) 5.04 Vp-p



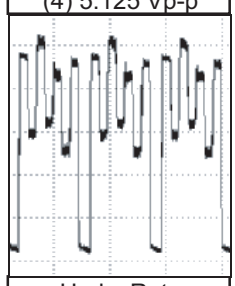
Horiz. Rate

(3) 4.75 Vp-p



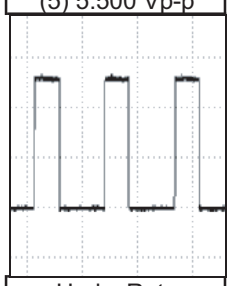
Horiz. Rate

(4) 5.125 Vp-p



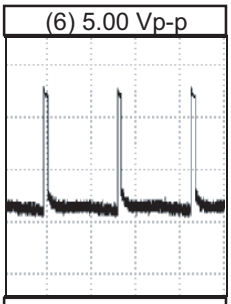
Horiz. Rate

(5) 5.500 Vp-p



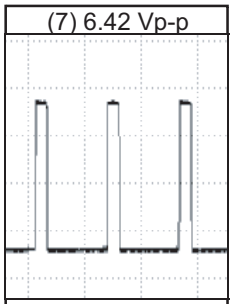
Horiz. Rate

(6) 5.00 Vp-p



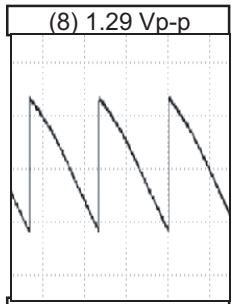
Vert. Rate

(7) 6.42 Vp-p



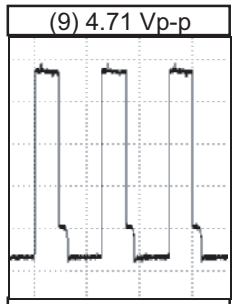
Horiz. Rate

(8) 1.29 Vp-p



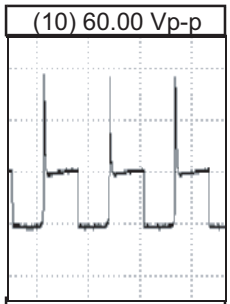
Vert. Rate

(9) 4.71 Vp-p



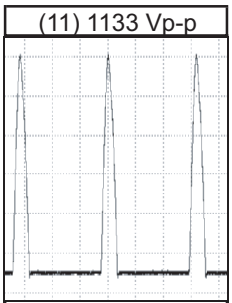
Horiz. Rate

(10) 60.00 Vp-p



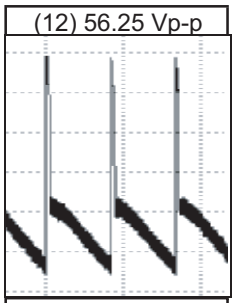
Horiz. Rate

(11) 1133 Vp-p



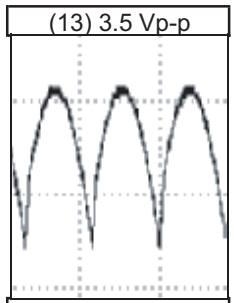
Horiz. Rate

(12) 56.25 Vp-p



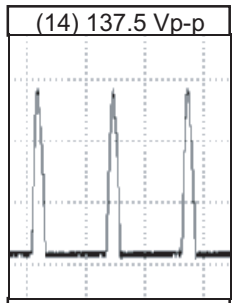
Vert.Rate

(13) 3.5 Vp-p



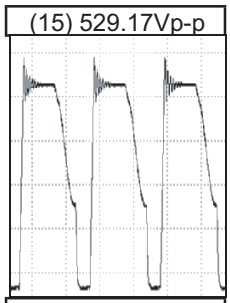
Vert. Rate

(14) 137.5 Vp-p



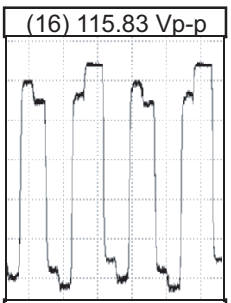
Horiz. Rate

(15) 529.17Vp-p



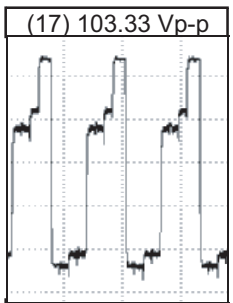
-

(16) 115.83 Vp-p



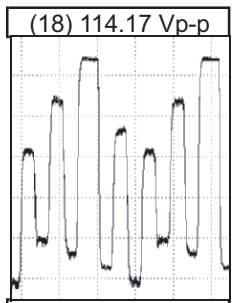
Horiz. Rate

(17) 103.33 Vp-p



Horiz. Rate

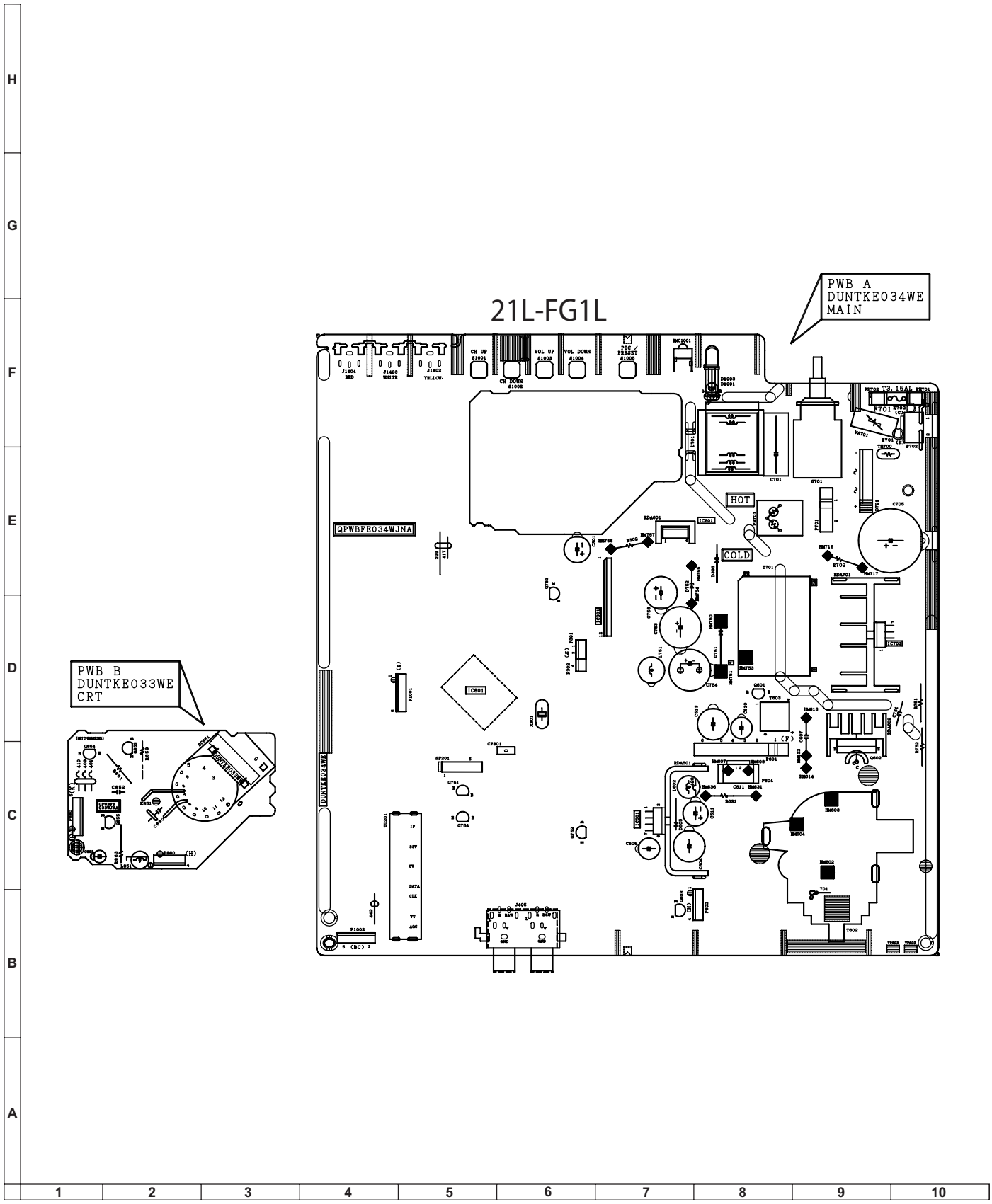
(18) 114.17 Vp-p



Horiz. Rate

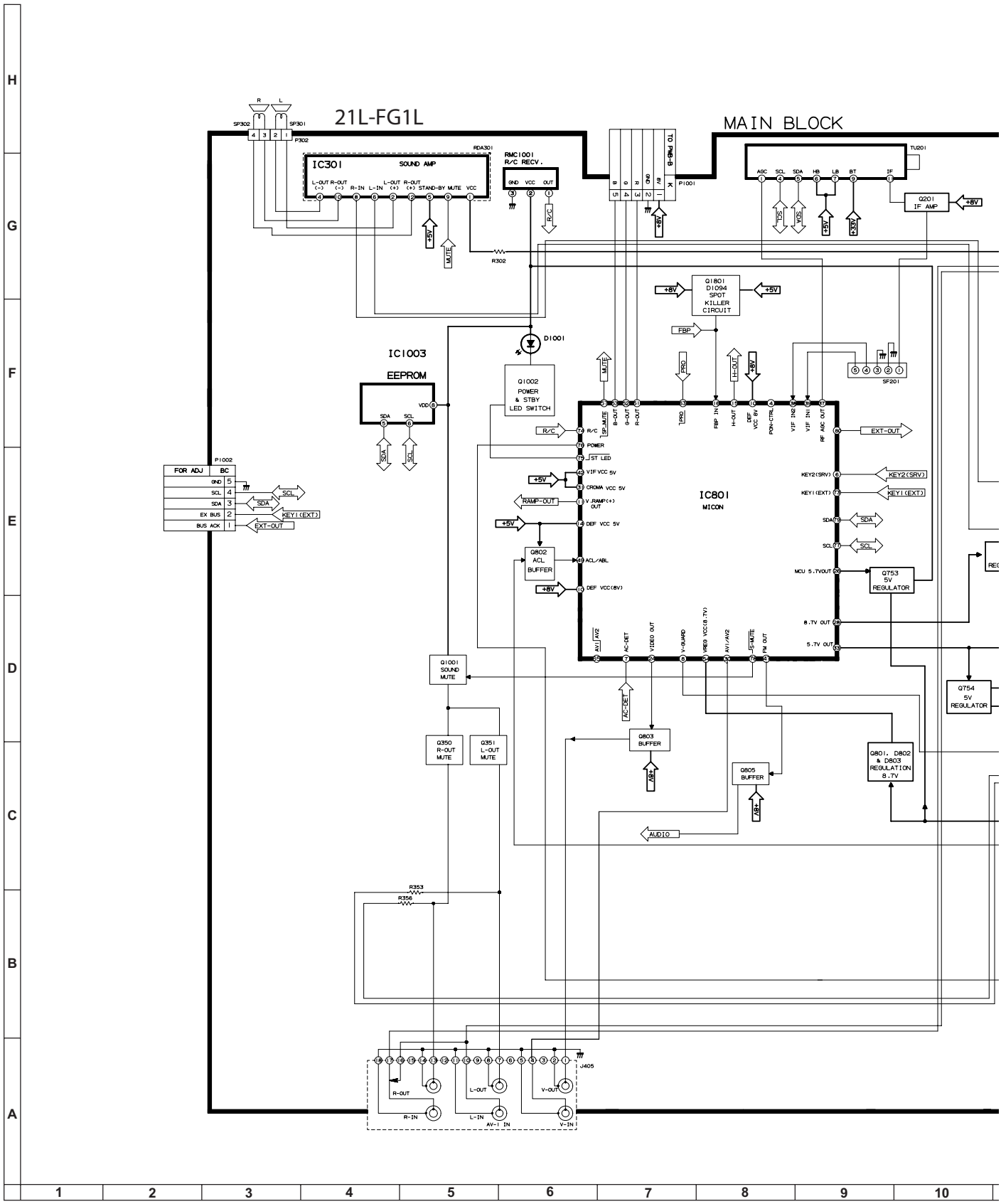
CHAPTER 7. CHASSIS LAYOUT

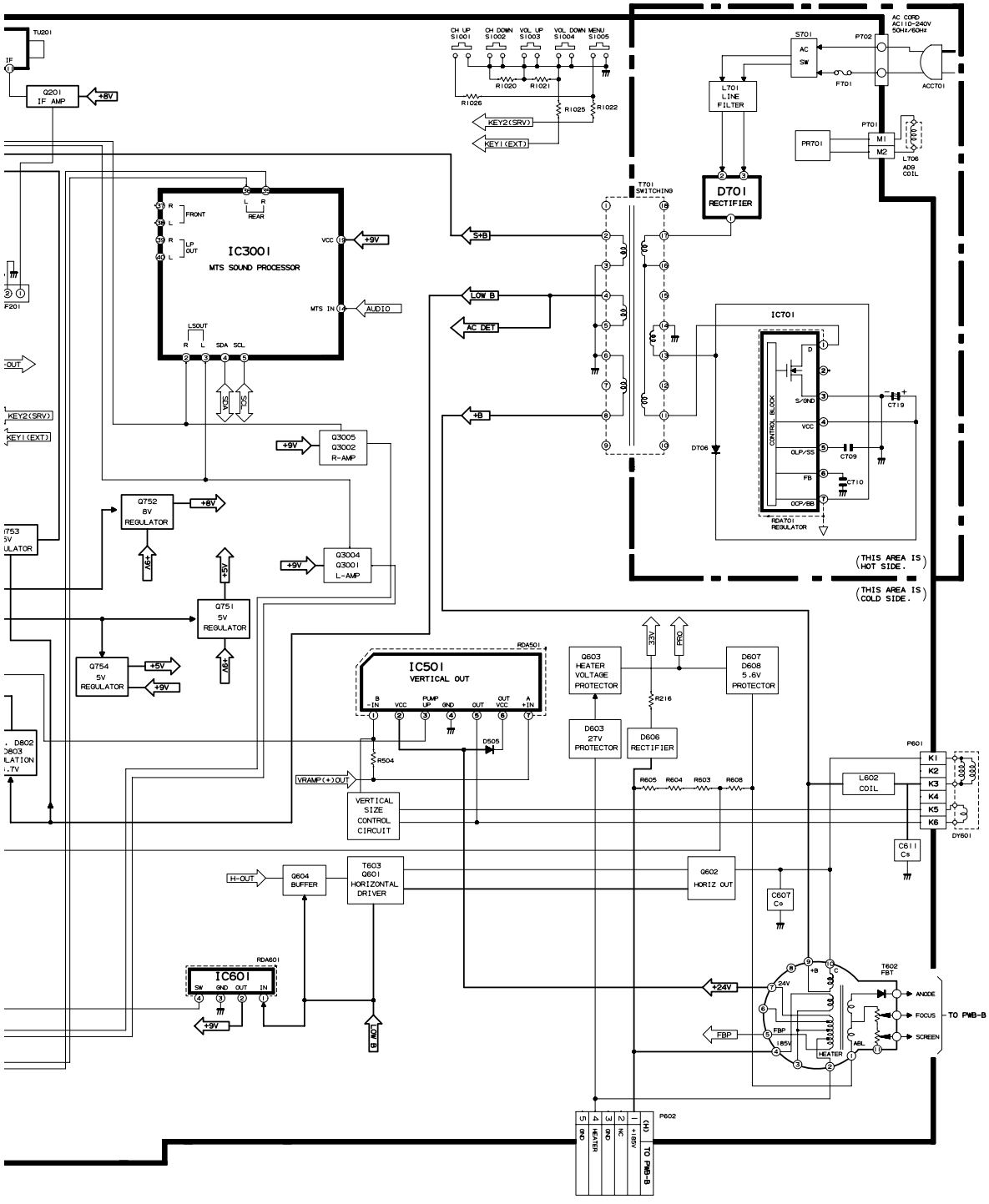
[1] CHASSIS LAYOUT



CHAPTER 8. BLOCK DIAGRAM

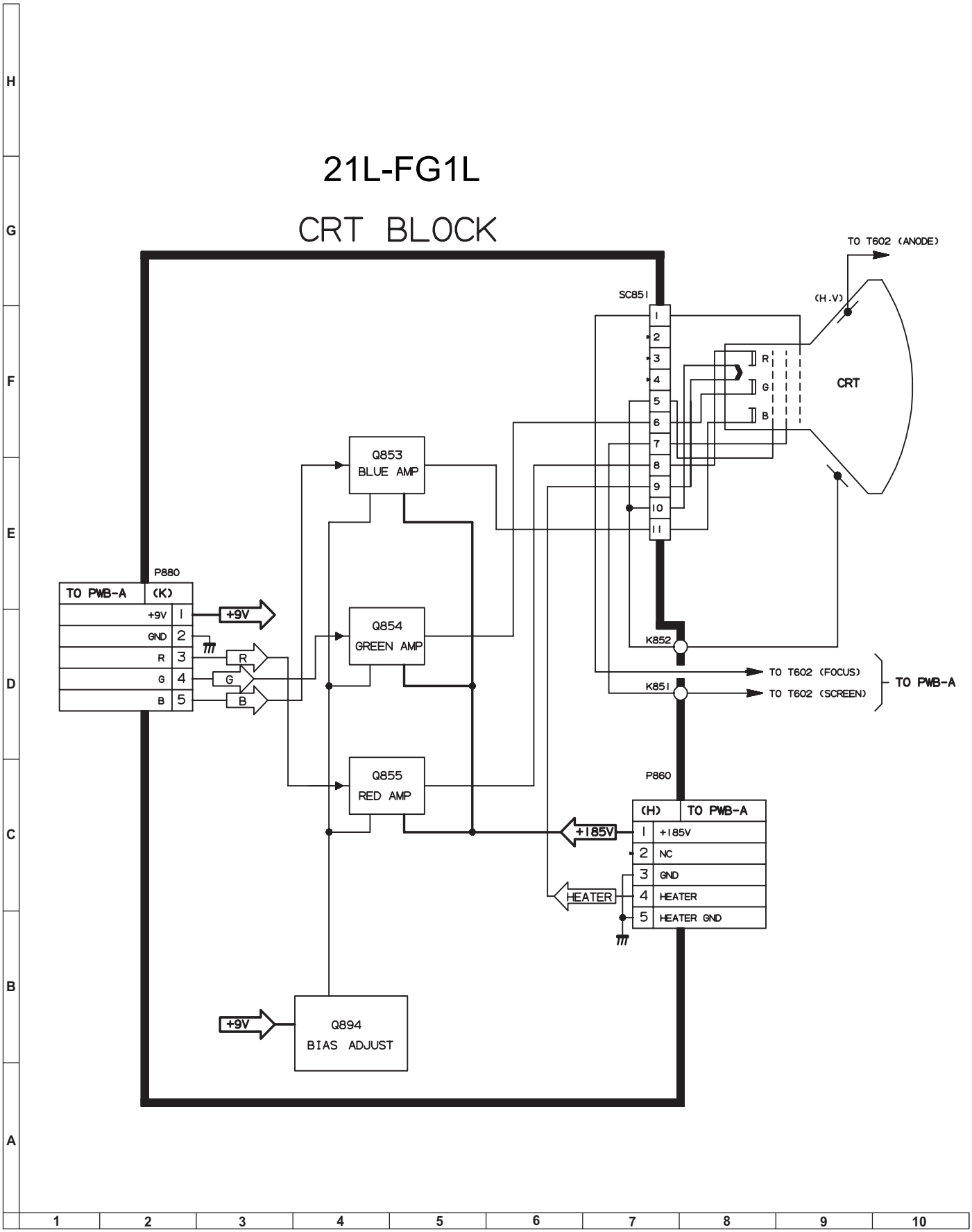
[1] BLOCK DIAGRAM: MAIN UNIT





10	11	12	13	14	15	16	17	18	19

[2] BLOCK DIAGRAM: CRT UNIT



CHAPTER 9. DESCRIPTION OF SCHEMATIC DIAGRAM

[1] DESCRIPTION OF SCHEMATIC DIAGRAM

DESCRIPTION OF SCHEMATIC DIAGRAM

NOTES:

1. *The unit of resistance "ohm" is omitted. (K=kΩ=1000Ω, M=MΩ)*
2. *All resistors are 1/16 watt, unless otherwise noted.*
3. *All capacitors are μF, unless otherwise noted. (P=pF=μμF)*
4. *(G) indicates ±2% tolerance may be used.*
5. *⏚ indicates line isolated ground.*

VOLTAGE MEASUREMENT CONDITIONS:

1. *All DC voltages are measured with DVM connected between points indicated and chassis ground, line voltage set at 120V AC and all controls set for normal picture unless otherwise indicated.*
2. *All voltages measured with 1000μ V B & W or Color signal.*

WAVEFORM MEASUREMENT CONDITIONS:

1. *Photographs taken on a standard gated color bar signal, the tint setting adjusted for proper color. The wave shapes at the red, green and blue cathodes of the picture tube depend on the tint, color level and picture control.*
2. *⟳ indicates waveform check points (See chart, waveforms are measured from point indicated to chassis ground.)*

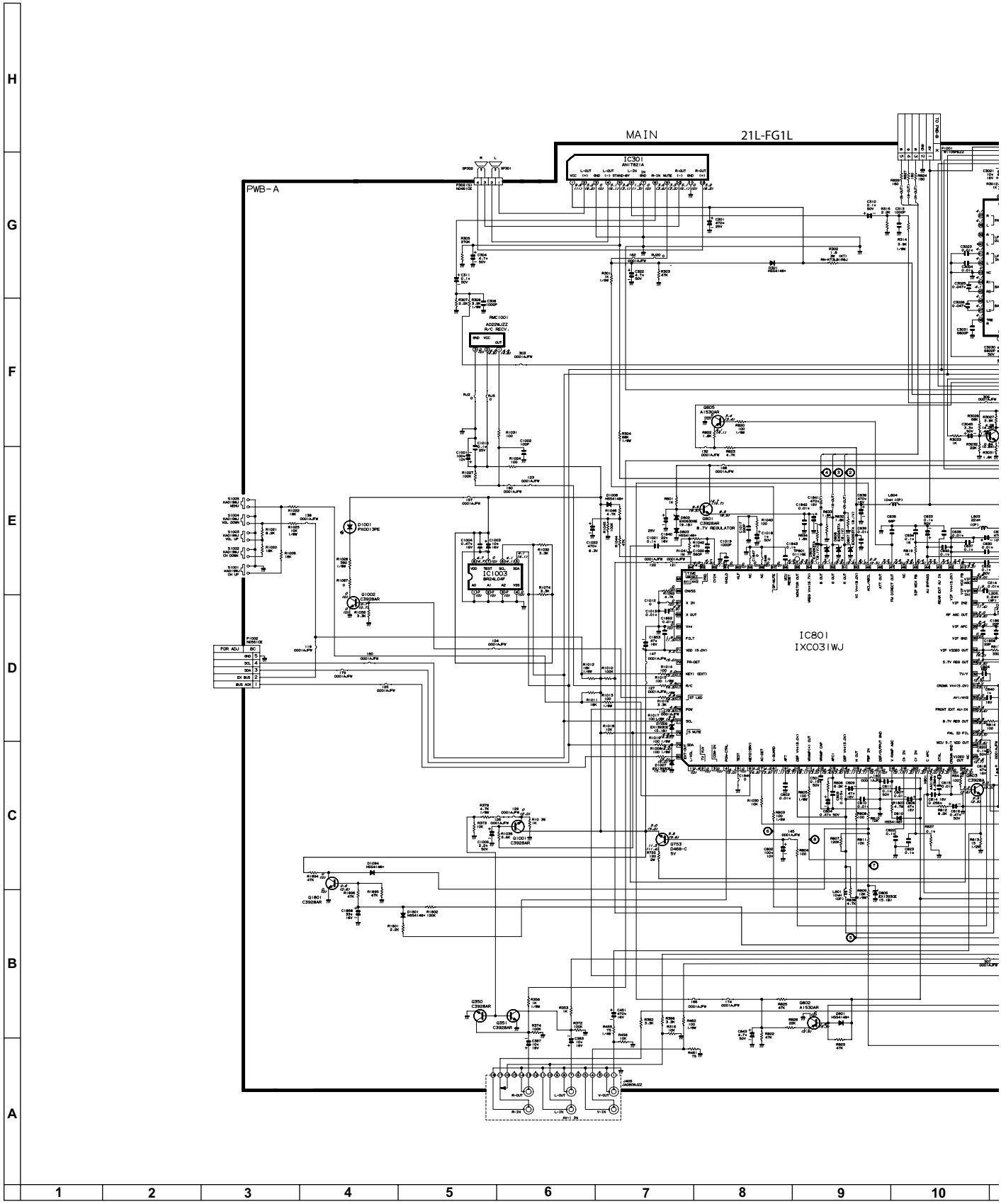
⚠ AND SHADED ( ) COMPONENTS = SAFETY RELATED PARTS.
▲ MARK= X-RAY RELATED PARTS.

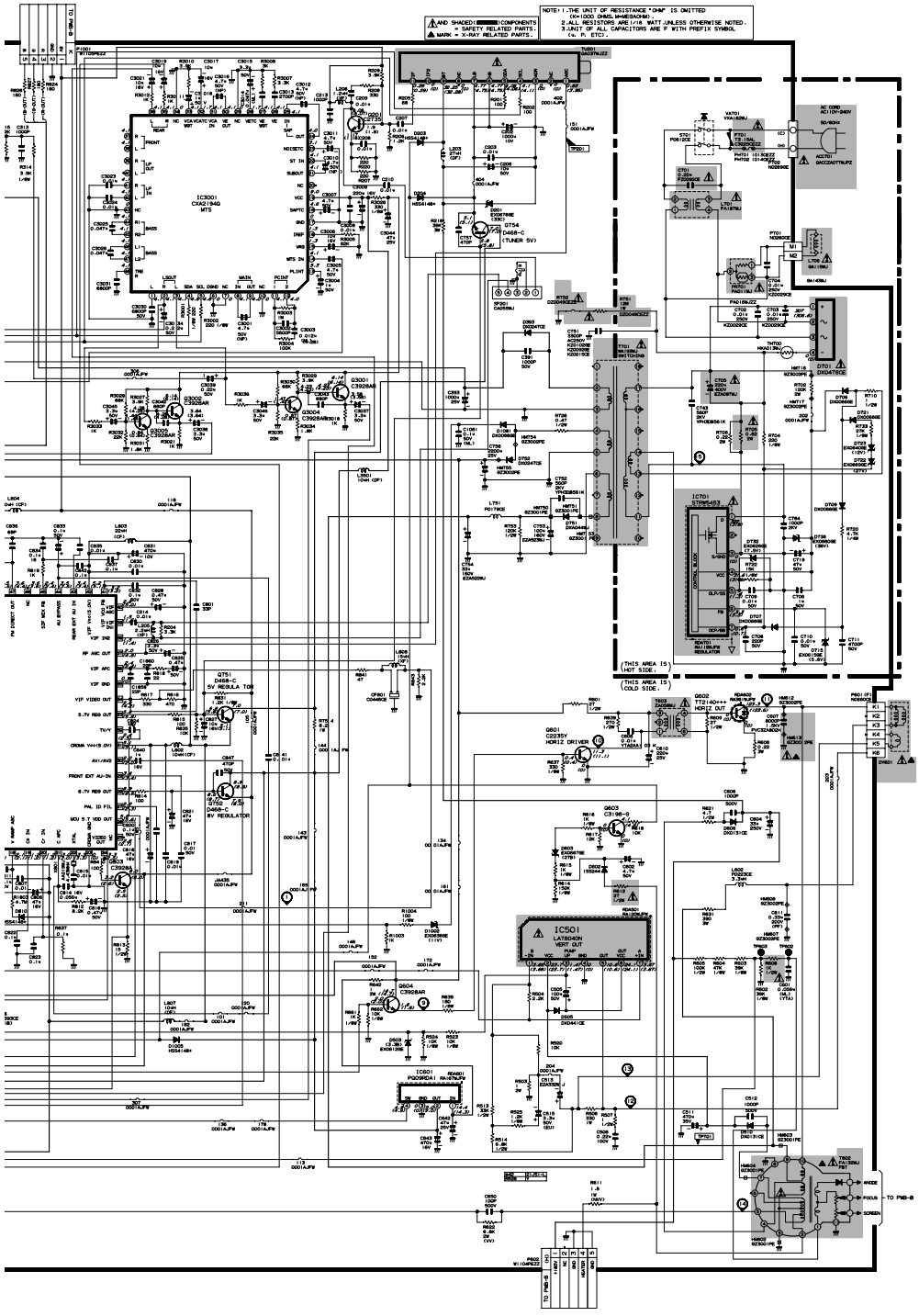
DRGANNES MARQUES ⚠ ET HACHRES ( ): PIECES RELATIVES A LA SECURITE.
MARQUE ▲ : PIECS RELATIVE AUX RAYONS X.

This circuit diagram is a standard one, printed circuits may be subject to change for product improvement without prior notice.

CHAPTER 10. SCHEMATIC DIAGRAMS

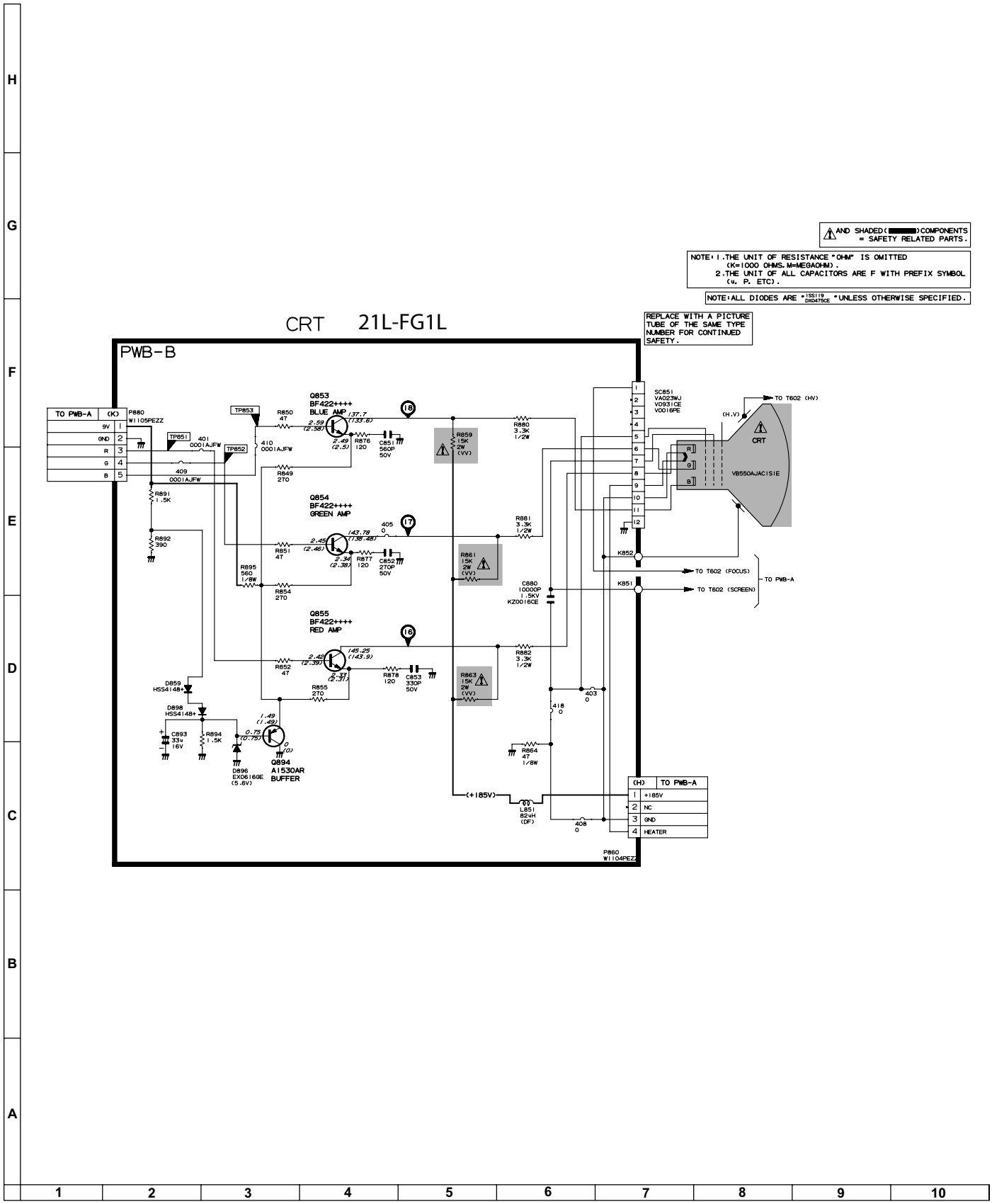
[1] SCHEMATIC DIAGRAM: MAIN UNIT





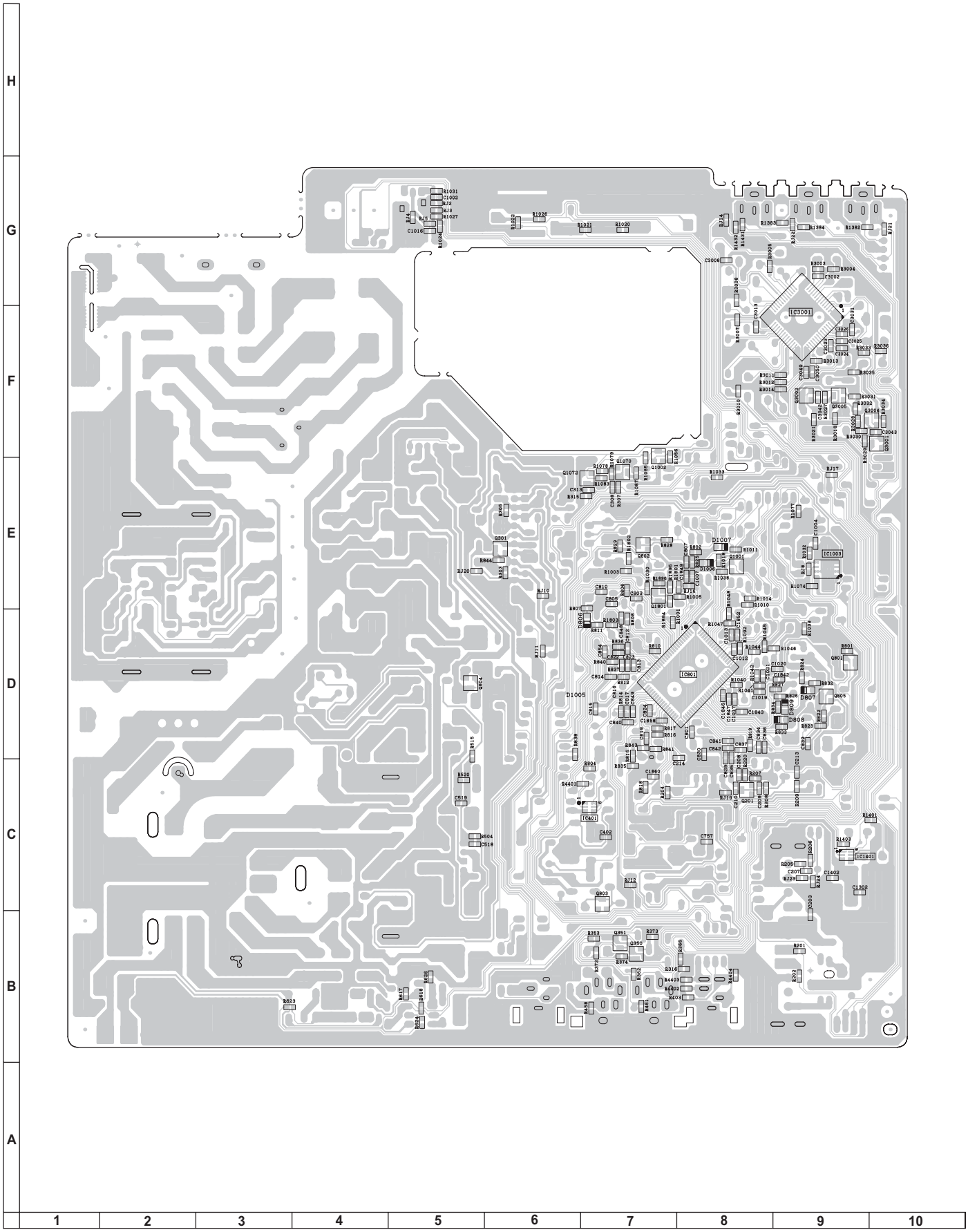
10	11	12	13	14	15	16	17	18	19

[2] SCHEMATIC DIAGRAM: CRT UNIT

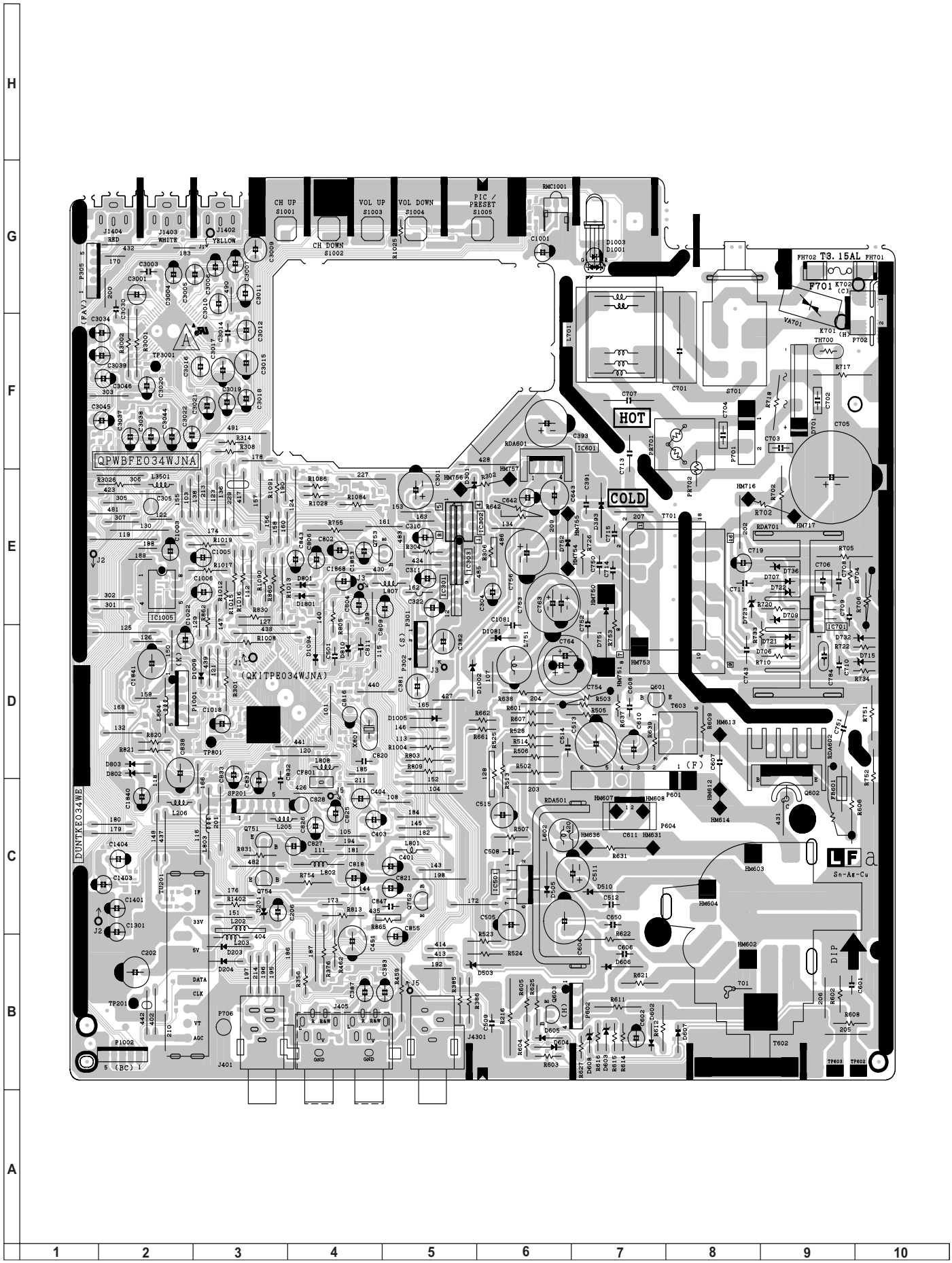


CHAPTER 11. PRINTED WIRING BOARD ASSEMBLIES

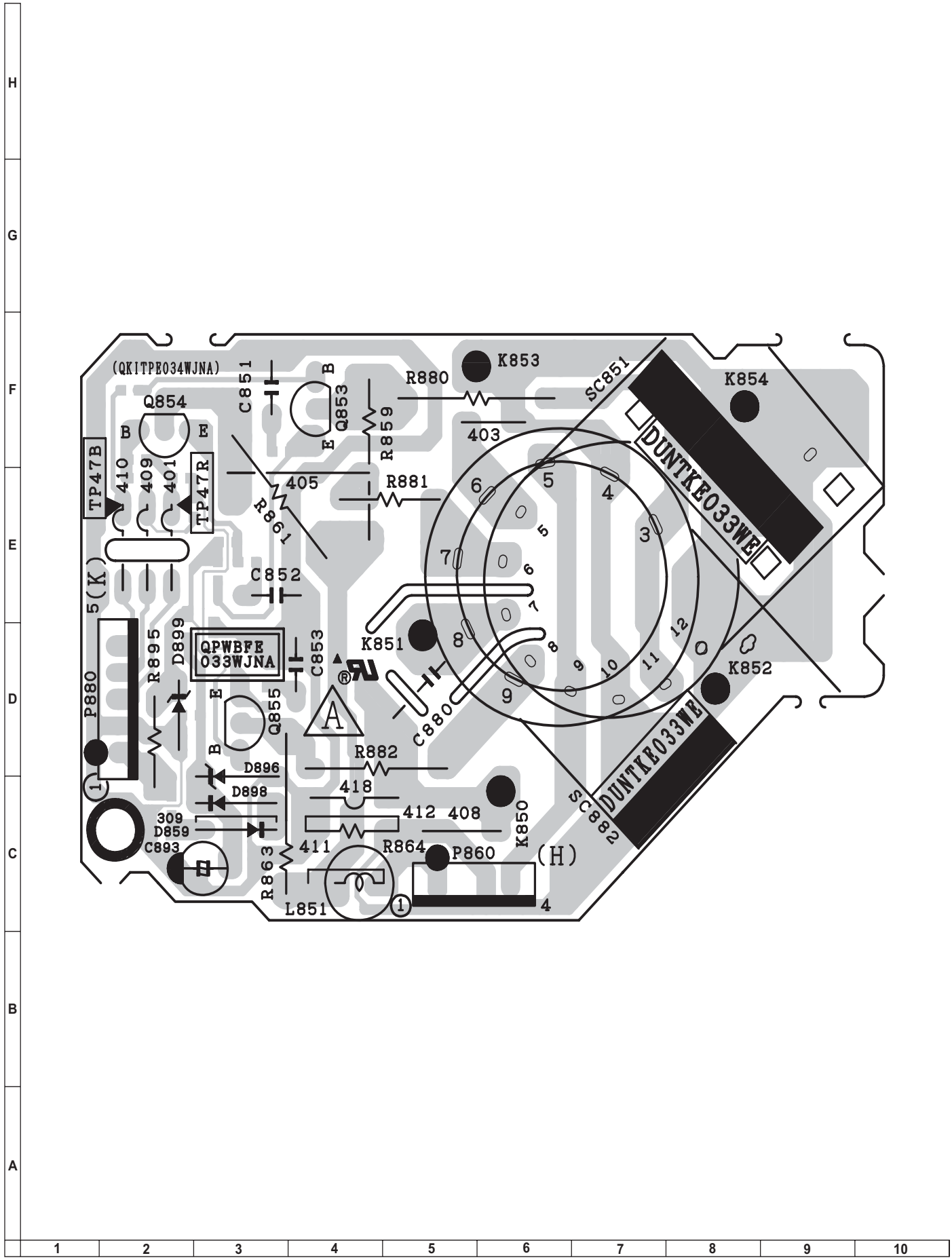
[1] PWB-A: MAIN UNIT (Wiring Side)



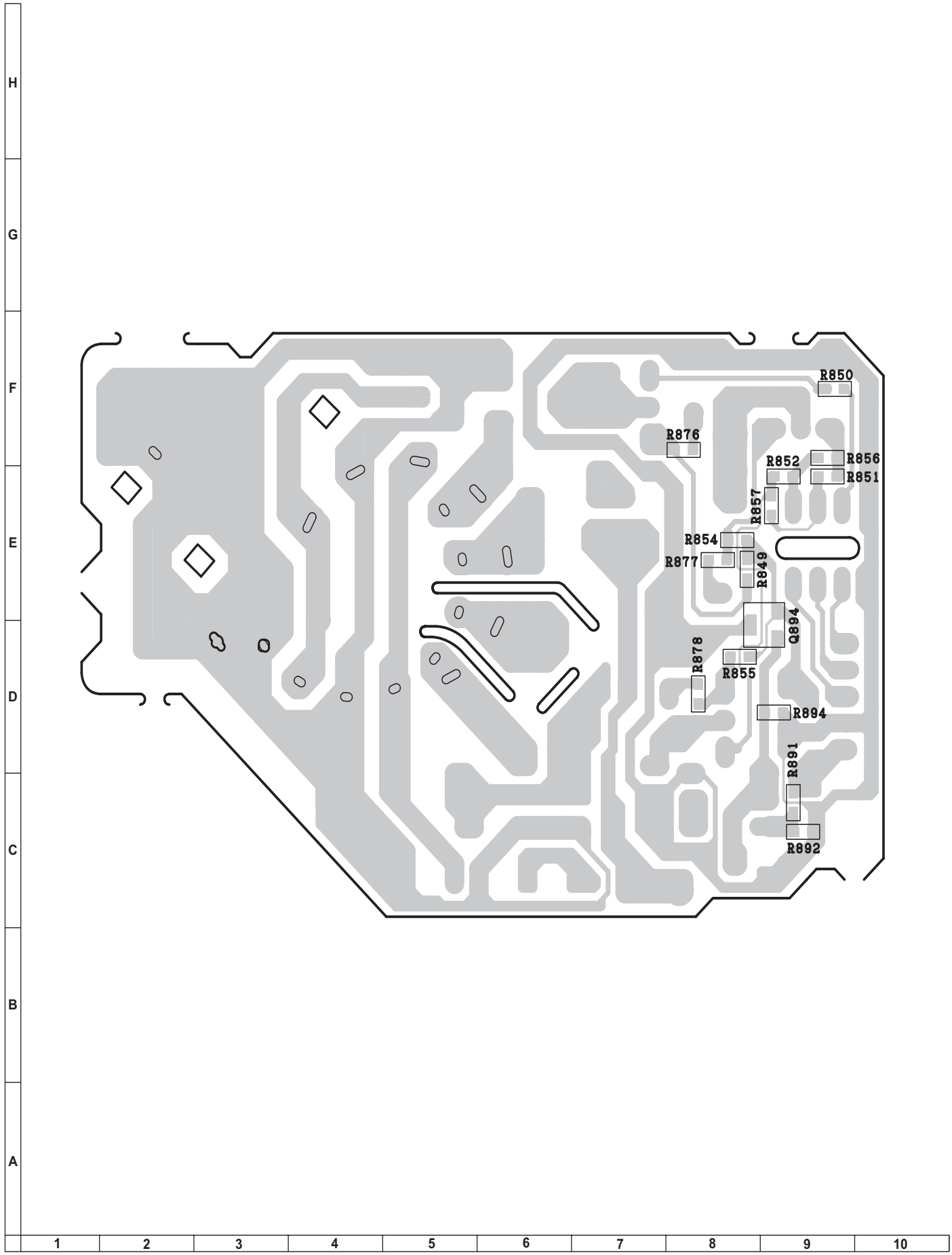
[2] PWB-A: MAIN UNIT (Chip Parts Side)



[3] PWB-B: CRT UNIT (Wiring Side)



[4] PWB-B: CRT UNIT (Chip Parts Side)



SHARP PARTS GUIDE

NO.S677221LFG1L

MODEL 21L-FG1L

CONTENTS

[1] PICTURE TUBE

[2] PRINTED WIRING BOARD ASSEMBLIES

[3] MAIN UNIT

[4] CRT UNIT

[5] MISCELLANEOUS PARTS

[6] SUPPLIED ACCESSORIES

[7] CABINET PARTS

[8] PACKING PARTS

■ INDEX

Parts marked with "⚠" are important for maintaining the safety of the set. Be sure to replace these parts with specified ones for maintaining the safety and performance of the set.

SHARP CORPORATION

This document has been published to be used for after sales service only.
The contents are subject to change without notice.

NO.	PARTS CODE	PRICE RANK	NEW MARK	PART DELIVERY	DESCRIPTION
	[1] PICTURE TUBE				
⚠	VB550AJAC1S1E			R	Picture Tube
⚠	RCiLGA115WJN1			R	Degaussing Coil
	QEARCA012WJZZ	AG		R	Ground-Part
	PMAGF3046CEZZ	AF		R	Magnet
	[2] PRINTED WIRING BOARD ASSEMBLIES				
	DUNTKE034WEA5	−		−	MAIN Unit
	DUNTKE033WEA4	−		−	CRT Unit
	[3] MAIN UNIT				
⚠ TU201	RTUNQA037WJZZ			R	Tuner
IC301	VHiAN17821A-1			R	AN17823A-1
⚠ IC501	VHiLA78040N-1	AE		R	LA78040N-1
IC601	VHiPQ09RDA1-1	AF		R	PQ090RDA1SZ
⚠ IC701	VHiSTRW5453-1	AM		R	I.C.
IC801	RH-iXC031WJZZQ			R	I.C.
IC1003	VHiBR24L04F-1Y	AE		R	BR24L04F-WE2
IC3001	VHiCXA2194Q-1S			R	I.C.
Q201	VS2SC2735//1EY			R	2SC2735//1E
Q350	VS2SC3928AR-1Y	AB		R	2SC3928AR
Q351	VS2SC3928AR-1Y	AB		R	2SC3928AR
Q601	VS2SC2235Y/1E+	AE		R	2SC2235
Q602	VSTT2140+++-F	AG		R	TT2140
Q603	VS2SC3198-G-1+	AA		R	2SC3198
Q604	VS2SC3928AR-1Y	AB		R	2SC3928AR
Q751	VS2SD468-C/-1+	AD		R	2SD468
Q752	VS2SD468-C/-1+	AD		R	2SD468
Q753	VS2SD468-C/-1+	AD		R	2SD468
Q754	VS2SD468-C/-1+	AD		R	2SD468
Q801	VS2SC3928AR-1Y	AB		R	2SC3928AR
Q802	VS2SA1530AR-1Y	AB		R	2SA1530AR
Q803	VS2SC3928AR-1Y	AB		R	2SC3928AR
Q805	VS2SA1530AR-1Y	AB		R	2SA1530AR
Q1001	VS2SC3928AR-1Y	AB		R	2SC3928AR
Q1002	VS2SC3928AR-1Y	AB		R	2SC3928AR
Q1801	VS2SC3928AR-1Y	AB		R	2SC3928AR
Q3001	VS2SC3928AR-1Y	AB		R	2SC3928AR
Q3002	VS2SC3928AR-1Y	AB		R	2SC3928AR
Q3004	VS2SC3928AR-1Y	AB		R	2SC3928AR
Q3005	VS2SC3928AR-1Y	AB		R	2SC3928AR
D201	RH-EX0676GEZZY	AA		R	Zener Diode , 33V
D203	VHDHSS4148+-1Y	AA		R	Diode
D204	VHDHSS4148+-1Y	AA		R	Diode
D301	VHDHSS4148+-1Y	AA		R	Diode
D393	RH-DX0247CEZZ	AE		R	Diode , DX0247CE
D503	RH-EX0612GEZZY	AB		R	Zener Diode , 5.1V
D505	RH-DX0441CEZZY	AC		R	Diode , DX0441CE
D510	RH-DX0131CEZZY	AC		R	Diode , DX0131CE
D602	VHD1SS244//-1Y	AB		R	Diode , 1SS244
D603	RH-EX0667GEZZY	AA		R	Zener Diode , 27V
D606	RH-DX0131CEZZY	AC		R	Diode , DX0131CE
⚠ D701	RH-DX0476CEZZ	AG		R	Diode , DX0476CE
D706	RH-DX0066GEZZY	AC		R	Diode , DX0066GE
D707	RH-DX0066GEZZY	AC		R	Diode , DX0066GE
D709	RH-DX0066GEZZY	AC		R	Diode , DX0066GE
D715	RH-EX0615GEZZY	AA		R	Zener Diode , 5.73V
D721	RH-DX0066GEZZY	AC		R	Diode , DX0066GE
D722	RH-EX0669GEZZY	AB		R	Zener Diode , 27.64V
D723	RH-EX0640GEZZY	AA		R	Zener Diode , 12.03V
D732	RH-EX0626GEZZY	AB		R	Zener Diode , 7.92V
D736	RH-EX0680GEZZY	AB		R	Zener Diode , 34.49V
D751	RH-DXA044WJZZ			R	Diode , DXA044WJ
D752	RH-DX0247CEZZ	AE		R	Diode , DX0247CE
D801	VHDHSS4148+-1Y	AA		R	Diode
D802	RH-EX0630GEZZY	AA		R	Zener Diode , 9.01V
D803	VHDHSS4148+-1Y	AA		R	Diode
D806	RH-EX1393CEZZY	AB		R	Zener Diode , 5.1V
D807	RH-EX0263TAZZY	AC		R	Zener Diode , 8.36V
D808	RH-EX0263TAZZY	AC		R	Zener Diode , 8.36V
D809	RH-EX0263TAZZY	AC		R	Zener Diode , 8.36V
D810	VHDHSS4148+-1Y	AA		R	Diode
D1001	RH-PX0013PEZZ	AC		R	Photodiode
D1002	RH-EX0636GEZZY	AA		R	Zener Diode , 10.71V
D1005	VHDHSS4148+-1Y	AA		R	Diode
D1006	RH-EX1393CEZZY	AB		R	Zener Diode , 5.1V
D1007	RH-EX1393CEZZY	AB		R	Zener Diode , 5.1V
D1008	VHDHSS4148+-1Y	AA		R	Diode
D1081	RH-DX0066GEZZY	AC		R	Diode , DX0066GE
D1094	VHDHSS4148+-1Y	AA		R	Diode
D1801	VHDHSS4148+-1Y	AA		R	Diode
VA701	RH-VXA182WJZZ			R	Varistor
X801	RCRSAA019WJZZ	AF		R	Crystal
L203	VP-DF270K0000Y	AB		R	Peaking 27mH
L205	VP-XF2R2K0000Y	AB		R	Peaking 2.2mH

NO.	PARTS CODE	PRICE RANK	NEW MARK	PART DELIVERY	DESCRIPTION
[3] MAIN UNIT					
L206	VP-XF1R2K0000Y	AB		R	Peaking 1.2mH
L602	RCiLP0223CEZZ+	AD		R	Coil
L701	RCiLFA187WJZZ	AD		R	Coil
L751	RCiLP0179CEZZ+	AD		R	Coil
L801	VP-DF100K0000Y	AB		R	Peaking 10mH
L802	VP-CF100K0000Y	AB		R	Peaking 10mH
L803	VP-CF220K0000Y	AB		R	Peaking 22mH
L804	VP-CF100K0000Y	AB		R	Peaking 10mH
L807	VP-DF100K0000Y	AB		R	Peaking 10mH
L808	VP-XF150K0000Y	AB		R	Peaking 15mH
L3501	VP-DF100K0000Y	AB		R	Peaking 10mH
SF201	RFiLCA055WJQZS			R	Coil
T602	RTRNFA132WJZZ			R	H-Volt Transformer
T603	RTRNZA058WJZZ	AD		R	Transformer
T701	RTRNWA193WJZZ			R	Transformer
C202	VCEA0A1AW108M+	AC		R	1000 10V Electrolytic
C203	VCKYCY1HF103ZY	AA		R	0.01 50V Ceramic
C206	VCEA0A1HW106M+	AB		R	10 50V Electrolytic
C207	VCKYCY1HF103ZY	AA		R	0.01 50V Ceramic
C208	VCKYCY1HF103ZY	AA		R	0.01 50V Ceramic
C209	VCKYCY1HF103ZY	AA		R	0.01 50V Ceramic
C210	VCKYCY1HF103ZY	AA		R	0.01 50V Ceramic
C213	VCKYCY1HB102KY	AA		R	1 50V Ceramic
C214	VCKYCY1HF103ZY	AA		R	0.01 50V Ceramic
C301	VCEA0A1EW477M+	AB		R	470 25V Electrolytic
C304	VCEA0A1HW475M+	AB		R	4.7 50V Electrolytic
C308	VCKYCY1HB102KY	AA		R	1 50V Ceramic
C310	VCEA0A1HW104M+	AB		R	0.1 50V Electrolytic
C311	VCEA0A1HW104M+	AB		R	0.1 50V Electrolytic
C313	VCKYCY1HB102KY	AA		R	1 50V Ceramic
C322	VCEA0A1HW475M+	AB		R	4.7 50V Electrolytic
C383	VCEA0A1CW106M+	AB		R	10 16V Electrolytic
C387	VCEA0A1CW106M+	AB		R	10 16V Electrolytic
C391	VCKYPA1HB102K+	AA		R	1000p 50V Ceramic
C393	VCEA0A1EW108M+	AD		R	1000 25V Electrolytic
C451	VCEA0A1CW477M+	AC		R	470 16V Electrolytic
C501	VCFYFA1HA154J+	AE		R	0.15 50V Mylar
C505	VCEA0A1HW107M+	AB		R	100 50V Electrolytic
C508	VCFYAA2AA224J+	AD		R	0.22 100V Mylar
C511	VCEA0A1VW477M+	AB		R	470 35V Electrolytic
C512	VCKYPA2HB102K+	AA		R	1000p 500V Ceramic
C513	RC-EZA332WJZZ+	AD		R	Capacitor
C515	VCEACA1HC335J+	AC		R	3.3 50V Electrolytic
C601	VCQYTA1HM563J+	AB		R	0.56 50V Mylar
C602	VCEA0A1HW475M+	AB		R	4.7 50V Electrolytic
C604	VCEA0A2EW336M+	AD		R	33 250V Electrolytic
C606	VCKYPA2HB102K+	AA		R	1000p 500V Ceramic
C607	VCFPVC3ZA802H	AD		R	8 1.8KV Metalized Polypro Film
C608	VCQYTA2AA103K+	AC		R	0.01 100V Mylar
C610	VCEA0A1EW227M+	AB		R	220 25V Electrolytic
C611	VCFPVC2EC334J	AD		R	0.33 200V Metalized Polypro Film
C642	VCEA0A1EW476M+	AB		R	47 25V Electrolytic
C643	VCEA0A1CW477M+	AC		R	470 16V Electrolytic
C650	VCKYPA2HB101K+	AB		R	100p 500V Ceramic
C701	RC-FZ029SCEZZ	AD		R	220 275V Metalized Plastic Film
C702	RC-KZ0029CEZZ+	AC		R	0.01 250V Ceramic
C703	RC-KZ0029CEZZ+	AC		R	0.01 250V Ceramic
C704	RC-KZ0029CEZZ+	AC		R	0.01 250V Ceramic
C705	RC-EZA097WJZZ	AM		R	220 400V Electrolytic
C706	VCFYFA1HA105J+	AE		R	1 50V Mylar
C708	VCKYPA1HB221K+	AB		R	220p 50V Ceramic
C709	VCQYTA1HM103J+	AB		R	0.01 50V Mylar
C710	VCQYTA1HM103J+	AB		R	0.01 50V Mylar
C711	VCKYPA1HB472K+	AB		R	4700p 50V Ceramic
C719	VCEA0A1HW476M+	AB		R	47 50V Electrolytic
C743	VCKYPH3DB561K	AC		R	560p 2KV Ceramic
C750	VCKYPA2HB102K+	AA		R	1000p 500V Ceramic
C751	RC-KZ0102GEZZ	AC		R	2kV Ceramic
C752	VCKYPH3DB561K	AC		R	560p 2KV Ceramic
C753	RC-EZA523WJZZ	AD		R	100 160V Electrolytic
C754	RC-EZA522WJZZ	AD		R	33 160V Electrolytic
C756	VCEA0A1EW228M+	AE		R	2200 25V Electrolytic
C757	VCCCCY1HH471JY	AA		R	470p 50V Ceramic
C784	RC-KZ1018CEZZ+	AC		R	1000p 2KV Ceramic
C801	VCCCCY1HH330JY	AA		R	33p 50V Ceramic
C802	VCEA0A1AW107M+	AB		R	100 10V Electrolytic
C803	VCKYCY1HB103KY	AA		R	0.01 50V Ceramic
C804	VCEA0A1HW474M+	AB		R	0.47 50V Electrolytic
C805	VCKYCY1HB153KY	AA		R	0.15 50V Ceramic
C806	VCEA0A1CW476M+	AB		R	47 16V Electrolytic
C807	VCKYCY1HB103KY	AA		R	0.01 50V Ceramic
C809	VCEA0A1CW476M+	AB		R	47 16V Electrolytic
C810	VCKYCY1HF103ZY	AA		R	0.01 50V Ceramic
C811	VCFYFA1HA104J+	AA		R	0.1 50V Mylar
C814	VCKYCY1CB563KY	AB		R	0.56 16V Ceramic

NO.	PARTS CODE	PRICE RANK	NEW MARK	PART DELIVERY	DESCRIPTION
[3] MAIN UNIT					
C815	VCKYCY1HB103KY	AA		R	0.01 50V Ceramic
C816	VCEA9M1HW474M+	AB		R	0.47 50V Electrolytic
C817	VCKYCY1HF103ZY	AA		R	0.01 50V Ceramic
C818	VCEA0A1CW476M+	AB		R	47 16V Electrolytic
C819	VCKYCY1HB103KY	AA		R	0.01 50V Ceramic
C820	VCFYFA1HA104J+	AA		R	0.1 50V Mylar
C821	VCEA0A1CW476M+	AB		R	47 16V Electrolytic
C822	VCKYCY1HB104KY	AA		R	0.1 50V Ceramic
C823	VCKYCY1HB104KY	AA		R	0.1 50V Ceramic
C824	VCKYCY1CF105ZY	AB		R	1 16V Ceramic
C825	VCEA0A1HW474M+	AB		R	0.47 50V Electrolytic
C826	VCEA0A1HW335M+	AB		R	3.3 50V Electrolytic
C827	VCEA0A1CW106M+	AB		R	10 16V Electrolytic
C828	VCEA9M1HW474M+	AB		R	0.47 50V Electrolytic
C830	VCKYCY1HB103KY	AA		R	0.01 50V Ceramic
C831	VCEA0A1AW477M+	AC		R	470 10V Electrolytic
C832	VCFYFA1HA104J+	AA		R	0.1 50V Mylar
C833	VCEA0A1HW104M+	AB		R	0.1 50V Electrolytic
C834	VCKYCY1CF104ZY	AB		R	0.1 16V Ceramic
C835	VCKYCY1HB103KY	AA		R	0.01 50V Ceramic
C836	VCCCCY1HH680JY	AA		R	68p 50V Ceramic
C837	VCKYCY1HB104KY	AA		R	0.1 50V Ceramic
C838	VCEA0A1CW477M+	AC		R	470 16V Electrolytic
C839	VCKYCY1HF103ZY	AA		R	0.01 50V Ceramic
C840	VCKYCY1CF105ZY	AB		R	1 16V Ceramic
C841	VCKYCY1HB103KY	AA		R	0.01 50V Ceramic
C842	VCKYCY1HB104KY	AA		R	0.1 50V Ceramic
C843	VCEA0A1HW475M+	AB		R	4.7 50V Electrolytic
C847	VCKYPA1HB471K+	AA		R	470p 50V Ceramic
C1001	VCEA0A1AW107M+	AB		R	100 10V Electrolytic
C1002	VCCCCY1HH101JY	AA		R	100p 50V Ceramic
C1003	VCEA0A1CW106M+	AB		R	10 16V Electrolytic
C1004	VCKYCY1CF474ZY	AB		R	0.47 16V Ceramic
C1006	VCEA0A1HW225M+	AB		R	2.2 50V Electrolytic
C1012	VRS-CY1JF000JY	AA		R	0 1/16W Metal Oxide
C1013	VCKYCY1HB103KY	AA		R	0.01 50V Ceramic
C1016	VCKYCY1EF104ZY	AA		R	0.1 25V Ceramic
C1017	VCKYCY1HB221KY	AA		R	220 50V Ceramic
C1018	VCEA0A1HW105M+	AB		R	1 50V Electrolytic
C1019	VCKYCY1HB102KY	AA		R	1 50V Ceramic
C1020	VCKYCY1HB561KY	AA		R	560 50V Ceramic
C1021	VCKYCY1EF104ZY	AA		R	0.1 25V Ceramic
C1022	VCEA0A0JW477M+	AC		R	470 6.3V Electrolytic
C1081	VCFYFA1HA104J+	AA		R	0.1 50V Mylar
C1840	VCEA0A1CW226M+	AC		R	22 16V Electrolytic
C1841	VCEA0A1CW477M+	AC		R	470 16V Electrolytic
C1842	VCKYCY1HB103KY	AA		R	0.01 50V Ceramic
C1843	VCKYCY1HB104KY	AA		R	0.1 50V Ceramic
C1846	VRS-CY1JF000JY	AA		R	0 1/16W Metal Oxide
C1847	VRS-CY1JF000JY	AA		R	0 1/16W Metal Oxide
C1849	VRS-CY1JF000JY	AA		R	0 1/16W Metal Oxide
C1852	VCKYCY1HB103KY	AA		R	0.01 50V Ceramic
C1853	VCEA0A1CW476M+	AB		R	47 16V Electrolytic
C1858	VCCCCY1HH220JY	AA		R	22p 50V Ceramic
C1860	VCCCCY1HH220JY	AA		R	22p 50V Ceramic
C1868	VCEA0A1CW336M+	AB		R	33 16V Electrolytic
C3001	VCE9GA1HW475M+	AB		R	4.7 50V Electrolytic
C3002	VCKYCY1HB562KY	AA		R	5.6 50V Ceramic
C3003	VCQYTA1HM123K+	AB		R	0.12 50V Mylar
C3004	VCEA0A1HW105M+	AB		R	1 50V Electrolytic
C3005	VCE9GA1HW475M+	AB		R	4.7 50V Electrolytic
C3006	VCEA0A1CW106M+	AB		R	10 16V Electrolytic
C3007	VCEA0A1HW475M+	AB		R	4.7 50V Electrolytic
C3008	VCKYCY1HF103ZY	AA		R	0.01 50V Ceramic
C3009	VCEA0A1CW227M+	AC		R	220 16V Electrolytic
C3010	VCE9GA1HW475M+	AB		R	4.7 50V Electrolytic
C3011	VCEA0A1HW475M+	AB		R	4.7 50V Electrolytic
C3012	VCE9GA1HW475M+	AB		R	4.7 50V Electrolytic
C3013	VCKYCY1HB272KY	AA		R	2.7 50V Ceramic
C3014	VCQYTA1HM473K+	AB		R	0.47 50V Mylar
C3015	VCEACA1HC335K+	AC		R	3.3 50V Electrolytic
C3016	VCE9GA1HW475M+	AB		R	4.7 50V Electrolytic
C3017	VCEACA1CC106K+			R	10 16V Electrolytic
C3018	VCEA0A1HW105M+	AB		R	1 50V Electrolytic
C3019	VCEA0A1CW106M+	AB		R	10 16V Electrolytic
C3021	VCEA0A1CW106M+	AB		R	10 16V Electrolytic
C3023	VCKYCY1HF103ZY	AA		R	0.01 50V Ceramic
C3024	VCKYCY1HF103ZY	AA		R	0.01 50V Ceramic
C3025	VCKYCY1HF473ZY	AA		R	0.47 50V Ceramic
C3026	VCKYCY1HF473ZY	AA		R	0.47 50V Ceramic
C3030	VCQYTA1HM682K+	AB		R	6.8 50V Mylar
C3031	VCKYCY1HF682ZY	AA		R	6.8 50V Ceramic
C3034	VCEA0A1HW224M+	AB		R	0.22 50V Electrolytic
C3037	VCEA0A1HW335M+	AB		R	3.3 50V Electrolytic
C3038	VCEA0A1HW335M+	AB		R	3.3 50V Electrolytic
C3039	VCEA0A1HW224M+	AB		R	0.22 50V Electrolytic

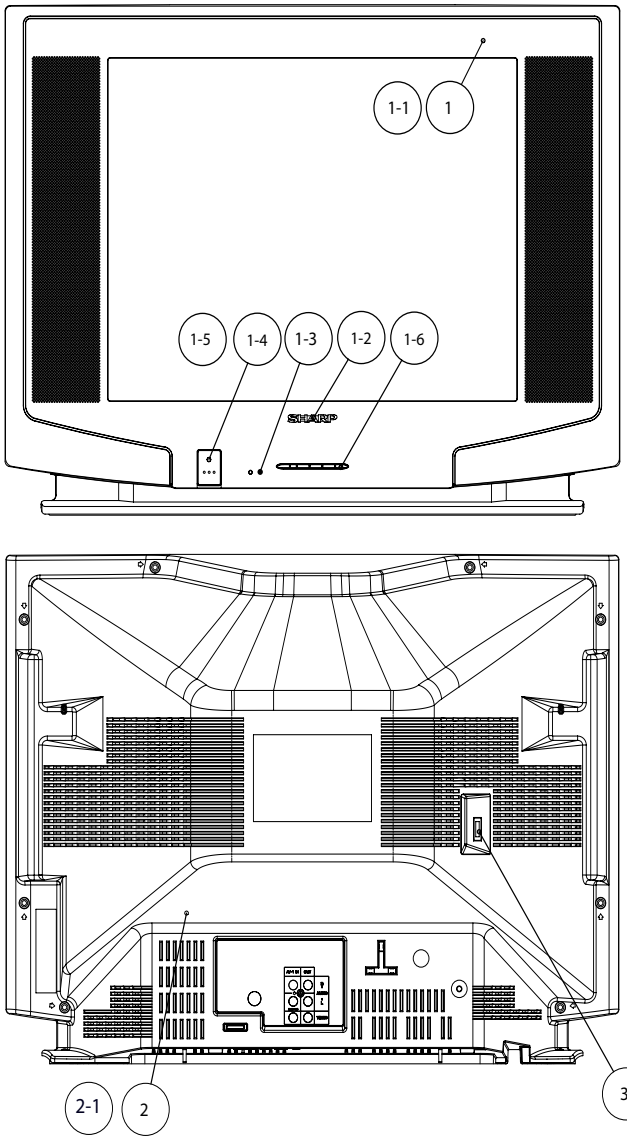
NO.	PARTS CODE	PRICE RANK	NEW MARK	PART DELIVERY	DESCRIPTION
[3] MAIN UNIT					
C3042	VCKYCY1HB681KY	AA		R	680 50V Ceramic
C3043	VCKYCY1HB681KY	AA		R	680 50V Ceramic
C3044	VCEA0A1EW476M+	AB		R	47 25V Electrolytic
C3045	VCEA0A1HW335M+	AB		R	3.3 50V Electrolytic
C3046	VCEA0A1HW335M+	AB		R	3.3 50V Electrolytic
RJ2	VRS-CY1JF000JY	AA		R	0 1/16W Metal Oxide
RJ5	VRS-CY1JF000JY	AA		R	0 1/16W Metal Oxide
RJ8	VRS-CY1JF000JY	AA		R	0 1/16W Metal Oxide
RJ12	VRS-CY1JF000JY	AA		R	0 1/16W Metal Oxide
RJ16	VRS-CY1JF000JY	AA		R	0 1/16W Metal Oxide
RJ19	VRS-CY1JF000JY	AA		R	0 1/16W Metal Oxide
RJ20	VRS-CY1JF000JY	AA		R	0 1/16W Metal Oxide
RJ24	VRS-CY1JF000JY	AA		R	0 1/16W Metal Oxide
R201	VRS-CY1JF101JY	AA		R	100 1/16W Metal Oxide
R202	VRS-CY1JF101JY	AA		R	100 1/16W Metal Oxide
R204	VRS-CY1JF332JY	AA		R	3.3K 1/16W Metal Oxide
R205	VRS-CY1JF680JY	AA		R	68 1/16W Metal Oxide
R206	VRS-CY1JF122JY	AA		R	1.2K 1/16W Metal Oxide
R207	VRS-CY1JF221JY	AA		R	220 1/16W Metal Oxide
R208	VRS-CY1JF331JY	AA		R	330 1/16W Metal Oxide
R209	VRS-CY1JF392JY	AA		R	3.9K 1/16W Metal Oxide
R216	VRS-RG3LB393J+	AC		R	39K 3W Metal Film
R220	VRS-CY1JF221JY	AA		R	220 1/16W Metal Oxide
R301	VRD-RA2BE102JY	AA		R	1K 1/8W Carbon
R302	VRN-KT3LB1R8J			R	1.8 3W Metal Oxide
R303	VRS-CY1JF473JY	AA		R	47K 1/16W Metal Oxide
R304	VRD-RA2BE683JY	AA		R	68K 1/8W Carbon
R305	VRS-CY1JF274JY	AA		R	270K 1/16W Metal Oxide
R307	VRS-CY1JF222JY	AA		R	2.2K 1/16W Metal Oxide
R308	VRD-RA2BE392JY	AA		R	3.9K 1/8W Carbon
R314	VRD-RA2BE392JY	AA		R	3.9K 1/8W Carbon
R315	VRS-CY1JF222JY	AA		R	2.2K 1/16W Metal Oxide
R316	VRS-CY1JF103JY	AA		R	10K 1/16W Metal Oxide
R353	VRS-CY1JF102JY	AA		R	1K 1/16W Metal Oxide
R356	VRD-RA2BE102JY	AA		R	1K 1/8W Carbon
R362	VRS-CY1JF332JY	AA		R	3.3K 1/16W Metal Oxide
R366	VRS-CY1JF332JY	AA		R	3.3K 1/16W Metal Oxide
R372	VRS-CY1JF104JY	AA		R	100K 1/16W Metal Oxide
R373	VRS-CY1JF103JY	AA		R	10K 1/16W Metal Oxide
R374	VRS-CY1JF104JY	AA		R	100K 1/16W Metal Oxide
R376	VRD-RA2BE472JY	AA		R	4.7K 1/8W Carbon
R458	VRS-CY1JF103JY	AA		R	10K 1/16W Metal Oxide
R459	VRD-RA2EE750JY	AA		R	75 1/4W Carbon
R461	VRS-CY1JF750JY	AA		R	75 1/16W Metal Oxide
R462	VRD-RA2BE101JY	AA		R	100 1/8W Carbon
R503	VRN-RL3DB1R0J+	AB		R	1 2W Metal Film
R504	VRS-CY1JF222JY	AA		R	2.2K 1/16W Metal Oxide
R506	VRS-RG3AB331J+	AB		R	330 1W Metal Oxide
R507	VRD-RM2HD1R0JY	AA		R	1 1/2W Carbon
R513	VRD-RM2HD333JY	AA		R	33K 1/2W Carbon
R514	VRD-RM2HD682JY	AA		R	6.8K 1/2W Carbon
R520	VRS-CY1JF103JY	AA		R	10K 1/16W Metal Oxide
R523	VRD-RA2BE103JY	AA		R	10K 1/8W Carbon
R524	VRD-RA2BE103JY	AA		R	10K 1/8W Carbon
R525	VRD-RA2BE122JY	AA		R	1.2K 1/8W Carbon
R601	VRD-RM2HD270JY	AA		R	27 1/2W Carbon
R602	VRD-RA2BE393JY	AA		R	39K 1/8W Carbon
R603	VRD-RA2BE393JY	AA		R	39K 1/8W Carbon
R604	VRD-RA2BE473JY	AA		R	47K 1/8W Carbon
R605	VRD-RM2HD104JY	AA		R	100K 1/2W Carbon
R606	VRN-RL3LBR22J+	AD		R	22 3W Metal Film
R608	VRD-RM2HD102JY	AA		R	1K 1/2W Carbon
R609	VRD-RM2HD270JY	AA		R	27 1/2W Carbon
R611	VRN-RL3AB1R8J+	AB		R	1.8 1W Metal Film
R612	VRD-RM2HD270JY	AA		R	27 1/2W Carbon
R614	VRD-RA2BE154JY	AA		R	150K 1/8W Carbon
R615	VRD-RA2BE102JY	AA		R	1K 1/8W Carbon
R616	VRD-RA2BE102JY	AA		R	1K 1/8W Carbon
R617	VRS-CY1JF123JY	AA		R	12K 1/16W Metal Oxide
R618	VRS-CY1JF103JY	AA		R	10K 1/16W Metal Oxide
R621	VRN-RL2HC4R7J+	AB		R	4.7 1/2W Metal Oxide
R622	VRS-VV3DB682J	AA		R	6.8K 2W Metal Oxide
R631	VRS-RG3LB391J+			R	390 3W Metal Oxide
R637	VRD-RA2BE331JY	AA		R	330 1/8W Carbon
R638	VRD-RA2BE181JY	AA		R	180 1/8W Carbon
R639	VRD-RM2HD271JY	AA		R	270 1/2W Carbon
R642	VRN-RL3DB1R0J+	AB		R	1 2W Metal Film
R661	VRD-RA2BE102JY	AA		R	1K 1/8W Carbon
R662	VRD-RA2BE103JY	AA		R	10K 1/8W Carbon
R702	VRS-VV3DB124J	AA		R	120K 2W Metal Oxide
R704	VRD-RA2BE221JY	AA		R	220 1/8W Carbon
R705	VRN-RL3DBR82J+	AB		R	82 2W Metal Film
R706	VRN-RL3DBR22J+	AB		R	22 2W Metal Film
R710	VRD-RM2HD1R0JY	AA		R	1 1/2W Carbon
R720	VRD-RA2EE472JY	AA		R	4.7K 1/4W Carbon

NO.	PARTS CODE	PRICE RANK	NEW MARK	PART DELIVERY	DESCRIPTION
[3] MAIN UNIT					
R722	VRD-RA2BE153JY	AA		R	15K 1/8W Carbon
R726	VRN-RL2HCR47J+	AB		R	0.47 1/2W Metal Oxide
R733	VRD-RA2BE273JY	AA		R	27K 1/8W Carbon
R751	RR-DZ0049CEZZY			R	39M 1/2W Carbon Film
R752	RR-DZ0049CEZZY			R	39M 1/2W Carbon Film
R753	VRD-RM2HD124JY	AA		R	120K 1/2W Carbon
R754	VRN-RL3AB8R2J+	AB		R	8.2 1W Metal Film
R755	VRS-RG3DB121J+	AB		R	120 2W Metal Film
R801	VRS-CY1JF102JY	AA		R	1K 1/16W Metal Oxide
R802	VRS-CY1JF473JY	AA		R	47K 1/16W Metal Oxide
R803	VRD-RA2BE101JY	AA		R	100 1/8W Carbon
R804	VRS-CY1JF101JY	AA		R	100 1/16W Metal Oxide
R805	VRD-RA2BE101JY	AA		R	100 1/8W Carbon
R806	VRS-CY1JF822JY	AA		R	8.2K 1/16W Metal Oxide
R807	VRS-CY1JF124JY	AA		R	120K 1/16W Metal Oxide
R808	VRS-CY1JF101JY	AA		R	100 1/16W Metal Oxide
R809	VRD-RA2BE123JY	AA		R	12K 1/8W Carbon
R810	VRS-CY1JF103JY	AA		R	10K 1/16W Metal Oxide
R811	VRS-CY1JF103JY	AA		R	10K 1/16W Metal Oxide
R812	VRS-CY1JF822JY	AA		R	8.2K 1/16W Metal Oxide
R813	VRD-RM2HD151JY	AA		R	150 1/2W Carbon
R814	VRS-CY1JF101JY	AA		R	100 1/16W Metal Oxide
R815	VRS-CY1JF101JY	AA		R	100 1/16W Metal Oxide
R816	VRS-CY1JF471JY	AA		R	470 1/16W Metal Oxide
R817	VRS-CY1JF331JY	AA		R	330 1/16W Metal Oxide
R818	VRS-CY1JF220JY	AA		R	22 1/16W Metal Oxide
R819	VRS-CY1JF102JY	AA		R	1K 1/16W Metal Oxide
R820	VRD-RA2BE101JY	AA		R	100 1/8W Carbon
R822	VRS-CY1JF182JY	AA		R	1.8K 1/16W Metal Oxide
R823	VRS-CY1JF472JY	AA		R	4.7K 1/16W Metal Oxide
R824	VRS-CY1JF181JY	AA		R	180 1/16W Metal Oxide
R825	VRS-CY1JF473JY	AA		R	47K 1/16W Metal Oxide
R826	VRS-CY1JF181JY	AA		R	180 1/16W Metal Oxide
R827	VRS-CY1JF181JY	AA		R	180 1/16W Metal Oxide
R828	VRS-CY1JF223JY	AA		R	22K 1/16W Metal Oxide
R829	VRS-CY1JF473JY	AA		R	47K 1/16W Metal Oxide
R831	VRD-RA2BE122JY	AA		R	1.2K 1/8W Carbon
R832	VRS-CY1JF182JY	AA		R	1.8K 1/16W Metal Oxide
R833	VRS-CY1JF182JY	AA		R	1.8K 1/16W Metal Oxide
R834	VRS-CY1JF182JY	AA		R	1.8K 1/16W Metal Oxide
R835	VRS-CY1JF103JY	AA		R	10K 1/16W Metal Oxide
R837	VCKYCY1HB104KY	AA		R	0.1 50V Ceramic
R838	VRS-CY1JF472JY	AA		R	4.7K 1/16W Metal Oxide
R840	VRS-CY1JF101JY	AA		R	100 1/16W Metal Oxide
R841	VRS-CY1JF470JY	AA		R	47 1/16W Metal Oxide
R843	VRS-CY1JF222JY	AA		R	2.2K 1/16W Metal Oxide
R1003	VRS-CY1JF102JY	AA		R	1K 1/16W Metal Oxide
R1004	VRD-RA2BE101JY	AA		R	100 1/8W Carbon
R1008	VRD-RA2BE101JY	AA		R	100 1/8W Carbon
R1010	VRS-CY1JF104JY	AA		R	100K 1/16W Metal Oxide
R1011	VRS-CY1JF183JY	AA		R	18K 1/16W Metal Oxide
R1012	VRD-RA2BE183JY	AA		R	18K 1/8W Carbon
R1013	VRD-RA2BE101JY	AA		R	100 1/8W Carbon
R1014	VRS-CY1JF101JY	AA		R	100 1/16W Metal Oxide
R1015	VRD-RA2BE101JY	AA		R	100 1/8W Carbon
R1016	VRD-RA2BE332JY	AA		R	3.3K 1/8W Carbon
R1017	VRD-RA2BE101JY	AA		R	100 1/8W Carbon
R1018	VRS-CY1JF103JY	AA		R	10K 1/16W Metal Oxide
R1019	VRD-RA2BE101JY	AA		R	100 1/8W Carbon
R1020	VRS-CY1JF183JY	AA		R	18K 1/16W Metal Oxide
R1021	VRS-CY1JF822JY	AA		R	8.2K 1/16W Metal Oxide
R1022	VRS-CY1JF183JY	AA		R	18K 1/16W Metal Oxide
R1024	VRS-CY1JF101JY	AA		R	100 1/16W Metal Oxide
R1025	VRD-RA2BE103JY	AA		R	10K 1/8W Carbon
R1026	VRS-CY1JF183JY	AA		R	18K 1/16W Metal Oxide
R1027	VRS-CY1JF104JY	AA		R	100K 1/16W Metal Oxide
R1028	VRD-RA2BE391JY	AA		R	390 1/8W Carbon
R1030	VRS-CY1JF103JY	AA		R	10K 1/16W Metal Oxide
R1031	VRS-CY1JF101JY	AA		R	100 1/16W Metal Oxide
R1032	VRS-CY1JF332JY	AA		R	3.3K 1/16W Metal Oxide
R1038	VRS-CY1JF562JY	AA		R	5.6K 1/16W Metal Oxide
R1039	VRS-CY1JF102JY	AA		R	1K 1/16W Metal Oxide
R1040	VRS-CY1JF101JY	AA		R	100 1/16W Metal Oxide
R1041	VRS-CY1JF105JY	AA		R	1M 1/16W Metal Oxide
R1042	VRS-CY1JF471JY	AA		R	470 1/16W Metal Oxide
R1044	VRS-CY1JF473JY	AA		R	47K 1/16W Metal Oxide
R1045	VRS-CY1JF104JY	AA		R	100K 1/16W Metal Oxide
R1046	VRS-CY1JF472JY	AA		R	4.7K 1/16W Metal Oxide
R1056	VRS-CY1JF332JY	AA		R	3.3K 1/16W Metal Oxide
R1074	VRS-CY1JF332JY	AA		R	3.3K 1/16W Metal Oxide
R1087	VRS-CY1JF000JY	AA		R	0 1/16W Metal Oxide
R1092	VRS-CY1JF472JY	AA		R	4.7K 1/16W Metal Oxide
R1801	VRS-CY1JF222JY	AA		R	2.2K 1/16W Metal Oxide
R1802	VRS-CY1JF124JY	AA		R	120K 1/16W Metal Oxide
R1803	VRS-CY1JF475JY	AA		R	4.7M 1/16W Metal Oxide
R1894	VRS-CY1JF473JY	AA		R	47K 1/16W Metal Oxide

NO.	PARTS CODE	PRICE RANK	NEW MARK	PART DELIVERY	DESCRIPTION
[3] MAIN UNIT					
R1895	VRS-CY1JF473JY	AA		R	47K 1/16W Metal Oxide
R1896	VRS-CY1JF473JY	AA		R	47K 1/16W Metal Oxide
R3001	VRD-RA2BE221JY	AA		R	220 1/8W Carbon
R3002	VRD-RA2BE221JY	AA		R	220 1/8W Carbon
R3003	VRS-CY1JF105JY	AA		R	1M 1/16W Metal Oxide
R3004	VRS-CY1JF104JY	AA		R	100K 1/16W Metal Oxide
R3005	VRS-CY1JF623JY	AA		R	62K 1/16W Metal Oxide
R3007	VRS-CY1JF332JY	AA		R	3.3K 1/16W Metal Oxide
R3008	VRS-CY1JF302JY	AA		R	3K 1/16W Metal Oxide
R3010	VRS-CY1JF392JY	AA		R	3.9K 1/16W Metal Oxide
R3011	VRS-CY1JF102JY	AA		R	1K 1/16W Metal Oxide
R3012	VRS-CY1JF102JY	AA		R	1K 1/16W Metal Oxide
R3018	VRS-CY1JF102JY	AA		R	1K 1/16W Metal Oxide
R3021	VRS-CY1JF102JY	AA		R	1K 1/16W Metal Oxide
R3026	VRD-RA2BE331JY	AA		R	330 1/8W Carbon
R3027	VRS-CY1JF392JY	AA		R	3.9K 1/16W Metal Oxide
R3028	VRS-CY1JF683JY	AA		R	68K 1/16W Metal Oxide
R3029	VRS-CY1JF392JY	AA		R	3.9K 1/16W Metal Oxide
R3030	VRS-CY1JF683JY	AA		R	68K 1/16W Metal Oxide
R3031	VRS-CY1JF182JY	AA		R	1.8K 1/16W Metal Oxide
R3032	VRS-CY1JF223JY	AA		R	22K 1/16W Metal Oxide
R3033	VRS-CY1JF102JY	AA		R	1K 1/16W Metal Oxide
R3034	VRS-CY1JF182JY	AA		R	1.8K 1/16W Metal Oxide
R3035	VRS-CY1JF223JY	AA		R	22K 1/16W Metal Oxide
R3036	VRS-CY1JF102JY	AA		R	1K 1/16W Metal Oxide
S701	QSW-P0612CEZZ	AG		R	Switch , POWER
S1001	QSW-KA019WJZZ+	AC		R	Switch , CH UP
S1002	QSW-KA019WJZZ+	AC		R	Switch , CH DOWN
S1003	QSW-KA019WJZZ+	AC		R	Switch , VOL UP
S1004	QSW-KA019WJZZ+	AC		R	Switch , VOL DOWN
S1005	QSW-KA019WJZZ+	AC		R	Switch , MENU
⚠ F701	QFS-C3225CEZZ	AC		R	Fuse , 3.15A 250V
FH701	QFSHD1013CEZZ+	AC		R	Fuse Holder
FH702	QFSHD1014CEZZ+	AC		R	Fuse Holder
J405	QTANJA080WJZZ			R	Jack
P302	QPLGN0461CEZZA	AB		R	Plug ,4Pin(S)
P601	QPLGN0660CEZZ	AC		R	Plug ,6Pin(F)
P602	LHLDW1104PEZZ	AB		R	Plug
P701	QPLGN0260CEZZ	AC		R	Plug ,2Pin(M)
P702	QPLGN0269GEZZ	AB		R	Plug ,2Pin
P1001	LHLDW1105PEZZ	AB		R	Plug
P1002	QPLGN0561CEZZ	AB		R	Plug ,5Pin(BC)
RMC1001	RRMCUA022WJZZ	AG		R	Remote Receiver
RDA501	PRDARA120WJFW	AD		R	Heat Sink for IC501
RDA601	PRDARA167WJFW	AD		R	Heat Sink for IC601
RDA602	PRDARA361WJFW			R	Heat Sink for Q602
RDA701	PRDARA119WJFW	AF		R	Heat Sink for IC701
TP801	QLUGP0111GEFW	AA		R	Lug
[4] CRT UNIT					
Q853	RH-TX0110BMZZ+	AC		R	TX0110
Q854	RH-TX0110BMZZ+	AC		R	TX0110
Q855	RH-TX0110BMZZ+	AC		R	TX0110
Q894	VS2SA1530AR-1Y	AB		R	2SA1530AR
D859	VHDHSS4148+-1Y	AA		R	Diode
D896	RH-EX0616GEZZY	AA		R	Zener Diode , 5.6V
D898	VHDHSS4148+-1Y	AA		R	Diode
L851	VP-MK820K0000+	AB		R	Peaking 82mH
C851	VCKYPA1HB561K+	AA		R	560p 50V Ceramic
C852	VCKYPA1HB271K+	AB		R	270p 50V Ceramic
C853	VCKYPA1HB331K+	AA		R	330p 50V Ceramic
C880	RC-KZ0016CEZZ	AC		R	10000p 1.5KV Ceramic
C893	VCEA0A1CW336M+	AB		R	33 16V Electrolytic
R849	VRS-CY1JF271JY	AA		R	270 1/16W Metal Oxide
R850	VRS-CY1JF470JY	AA		R	47 1/16W Metal Oxide
R851	VRS-CY1JF470JY	AA		R	47 1/16W Metal Oxide
R852	VRS-CY1JF470JY	AA		R	47 1/16W Metal Oxide
R854	VRS-CY1JF271JY	AA		R	270 1/16W Metal Oxide
R855	VRS-CY1JF271JY	AA		R	270 1/16W Metal Oxide
⚠ R859	VRS-VV3DB153J	AA		R	15K 12W Metal Oxide
⚠ R861	VRS-VV3DB153J	AA		R	15K 12W Metal Oxide
⚠ R863	VRS-VV3DB153J	AA		R	15K 12W Metal Oxide
R864	VRD-RA2BE470JY	AA		R	47 1/8W Carbon
R876	VRS-CY1JF121JY	AA		R	120 1/16W Metal Oxide
R877	VRS-CY1JF121JY	AA		R	120 1/16W Metal Oxide
R878	VRS-CY1JF121JY	AA		R	120 1/16W Metal Oxide
R880	VRD-RM2HD332JY	AA		R	3.3K 1/2W Carbon
R881	VRD-RM2HD332JY	AA		R	3.3K 1/2W Carbon
R882	VRD-RM2HD332JY	AA		R	3.3K 1/2W Carbon
R891	VRS-CY1JF152JY	AA		R	1.5K 1/16W Metal Oxide
R892	VRS-CY1JF391JY	AA		R	390 1/16W Metal Oxide
R894	VRS-CY1JF152JY	AA		R	1.5K 1/16W Metal Oxide
R895	VRD-RA2BE561JY	AA		R	560 1/8W Carbon
P860	LHLDW1104PEZZ	AB		R	Plug 4Pin (H)

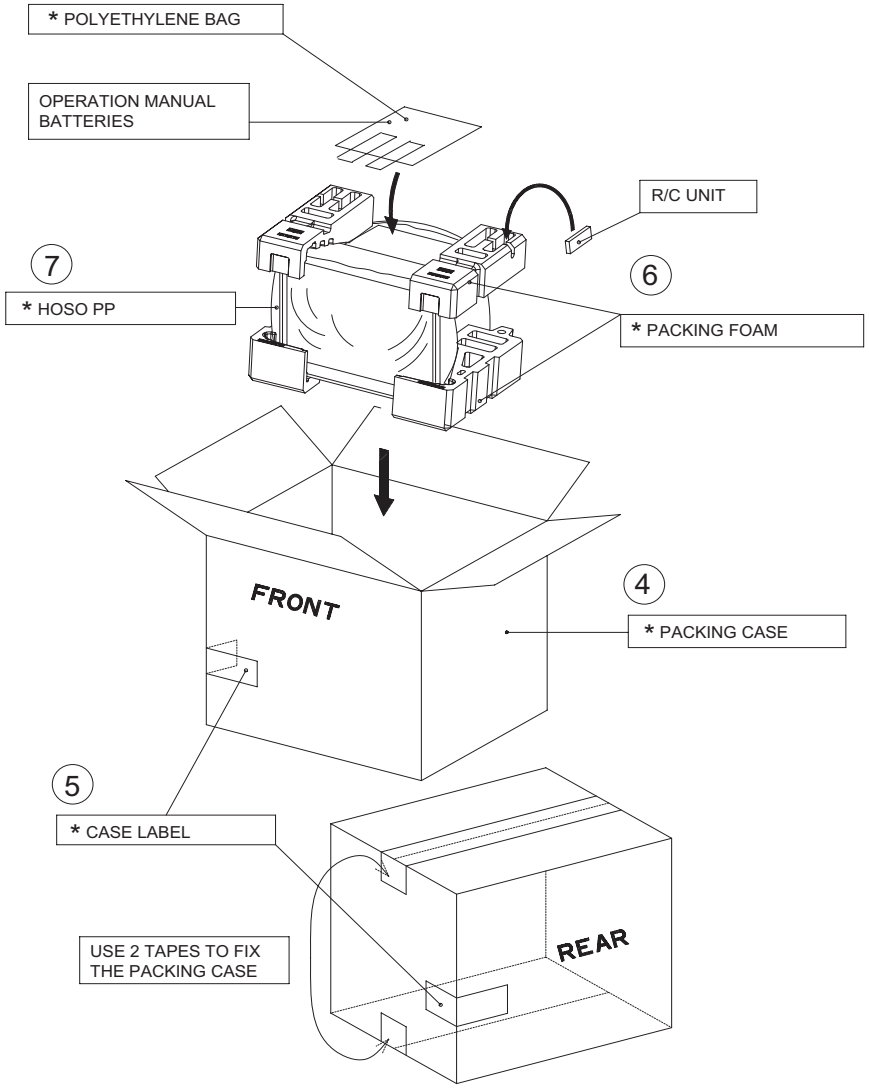
NO.	PARTS CODE	PRICE RANK	NEW MARK	PART DELIVERY	DESCRIPTION
[4] CRT UNIT					
P880	LHLDW1105PEZZ	AB		R	Plug 5Pin (K)
SC851	QSOCVA023WJZZ	AE		R	Socket , 12Pin
[5] MISCELLANEOUS PARTS					
⚠ ACC701	QACCZA079WJPZ			R	AC Cord
SP301	VSP9050PA02WA	AH		R	SPEAKER 16 OHM
	QCNW-F201WJPZ			R	SP WIRE (+--+)
	QCNW-A230WJZZ	AD		R	H-WIRE
	QCNW-A720WJZZ	AD		R	K-WIRE
[6] SUPPLIED ACCESSORIES					
	RRMCGA257WJSB			R	Infrared Remote Control Unit
	TINS-D209WJZZ			R	E/SPA Operation Manual
	UBATU0247AJZZ			R	Battery

[7] CABINET PARTS



NO.	PARTS CODE	PRICE RANK	NEW MARK	PART DELIVELY	DESCRIPTION
[7] CABINET PARTS					
1	CCABAB834WEV0	–		R	Front Cabinet Ass'y
1-1	Not Available	–		–	Front Cabinet
1-2	GCOVAB580WJSA	–		R	R/C Cover
1-3	HBDGB3155CESA	–		R	Sharp Badge
1-4	JBTN-A551WJSB	–		R	Power Button
1-5	MSPRCA067WJFW	–		R	Power Button Spring
1-6	JBTN-A552WJSC	–		R	Control Button
2	CCABBA755WEV1	–		R	Rear Cabinet Ass'y
2-1	Not Available	–		–	Rear Cabinet
3	LHLDWA101WJZZ	–		R	AC Cord Hook

[8] PACKING PARTS



MARK * : NON REPLACEMENT ITEMS

NO.	PARTS CODE	PRICE RANK	NEW MARK	PART DELIVELY	DESCRIPTION
[8] PACKING PARTS					
4	SPAKCD591WJZZ	–		–	Packing Case
5	TLABZB556WJZZ	–		–	Case Label
6	SPAKXB002WJZZ	–		–	Buffer Material
7	SPAKPA771WJZZ	–		–	HOSO PP

NO.	PARTS CODE	PRICE RANK	NEW MARK	PART DELIVERY	DESCRIPTION

■INDEX

PARTS CODE	No.	PRICE RANK	NEW MARK	PART RANK
【 C 】				
CCABAB834WEV0	7-1	-		R
CCABBA755WEV1	7-2	-		R
【 D 】				
DUNTKE033WEA4	2-	-		-
DUNTKE034WEA5	2-	-		-
【 G 】				
GCÖVAB580WJSA	7-1-2	-		R
【 H 】				
HBDGB3155CESA	7-1-3	-		R
【 J 】				
JBTN-A551WJSB	7-1-4	-		R
JBTN-A552WJSC	7-1-6	-		R
【 L 】				
LHLDW1104PEZZ	3-P602	AB		R
〃	4-P860	AB		R
LHLDW1105PEZZ	3-P1001	AB		R
〃	4-P880	AB		R
LHLDWA101WJZZ	7-3	-		R
【 M 】				
MSPRCA067WJFW	7-1-5	-		R
【 N 】				
Not Available	7-1-1	-		-
〃	7-2-1	-		-
【 P 】				
PMAGF3046CEZZ	1-	AF		R
PRDARA119WJFW	3-RDA701	AF		R
PRDARA120WJFW	3-RDA501	AD		R
PRDARA167WJFW	3-RDA601	AD		R
PRDARA361WJFW	3-RDA602			R
【 Q 】				
QACCZA079WJPZ	5-ACC701			R
QCNW-A230WJZZ	5-	AD		R
QCNW-A720WJZZ	5-	AD		R
QCNW-F201WJPZ	5-			R
QEARCA012WJZZ	1-	AG		R
QFS-C3225CEZZ	3-F701	AC		R
QFSHD1013CEZZ+	3-FH701	AC		R
QFSHD1014CEZZ+	3-FH702	AC		R
QLUGP0111GEFW	3-TP801	AA		R
QPLGN0260CEZZ	3-P701	AC		R
QPLGN0269GEZZ	3-P702	AB		R
QPLGN0461CEZZA	3-P302	AB		R
QPLGN0561CEZZ	3-P1002	AB		R
QPLGN0660CEZZ	3-P601	AC		R
QSÖCVA023WJZZ	4-SC851	AE		R
QSW-KA019WJZZ+	3-S1001	AC		R
〃	3-S1002	AC		R
〃	3-S1003	AC		R
〃	3-S1004	AC		R
〃	3-S1005	AC		R
QSW-P0612CEZZ	3-S701	AG		R
QTANJA080WJZZ	3-J405			R
【 R 】				
RC-EZA097WJZZ	3-C705	AM		R
RC-EZA332WJZZ+	3-C513	AD		R
RC-EZA522WJZZ	3-C754	AD		R
RC-EZA523WJZZ	3-C753	AD		R
RC-FZ029SCEZZ	3-C701	AD		R
RCiLFA187WJZZ	3-L701	AD		R
RCiLGA115WJN1	1-			R
RCiLP0179CEZZ+	3-L751	AD		R
RCiLP0223CEZZ+	3-L602	AD		R
RC-KZ0016CEZZ	4-C880	AC		R
RC-KZ0029CEZZ+	3-C702	AC		R
〃	3-C703	AC		R
〃	3-C704	AC		R
RC-KZ0102GEZZ	3-C751	AC		R
RC-KZ1018CEZZ+	3-C784	AC		R
RCRSAA019WJZZ	3-X801	AF		R
RFiLCA055WJQZS	3-SF201			R
RH-DX0066GEZZY	3-D706	AC		R
〃	3-D707	AC		R
〃	3-D709	AC		R
〃	3-D721	AC		R
〃	3-D1081	AC		R

PARTS CODE	No.	PRICE RANK	NEW MARK	PART RANK
PARTS CODE	No.	PRICE RANK	NEW MARK	PART RANK
〃	3-D606	AC		R
RH-DX0247CEZZ	3-D393	AE		R
〃	3-D752	AE		R
RH-DX0441CEZZY	3-D505	AC		R
RH-DX0476CEZZ	3-D701	AG		R
RH-DXA044WJZZ	3-D751			R
RH-EX0263TAZZY	3-D807	AC		R
〃	3-D808	AC		R
〃	3-D809	AC		R
RH-EX0612GEZZY	3-D503	AB		R
RH-EX0615GEZZY	3-D715	AA		R
RH-EX0616GEZZY	4-D896	AA		R
RH-EX0626GEZZY	3-D732	AB		R
RH-EX0630GEZZY	3-D802	AA		R
RH-EX0636GEZZY	3-D1002	AA		R
RH-EX0640GEZZY	3-D723	AA		R
RH-EX0667GEZZY	3-D603	AA		R
RH-EX0669GEZZY	3-D722	AB		R
RH-EX0676GEZZY	3-D201	AA		R
RH-EX0680GEZZY	3-D736	AB		R
RH-EX1393CEZZY	3-D806	AB		R
〃	3-D1006	AB		R
〃	3-D1007	AB		R
RH-iXC031WJZZQ	3-iC801			R
RH-PX0013PEZZ	3-D1001	AC		R
RH-TX0110BMZZ+	4-Q853	AC		R
〃	4-Q854	AC		R
〃	4-Q855	AC		R
RH-VXA182WJZZ	3-VA701			R
RR-DZ0049CEZZY	3-R751			R
〃	3-R752			R
RRMCGA257WJSB	6-			R
RRMCUA022WJZZ	3-RMC1001	AG		R
RTRNFA132WJZZ	3-T602			R
RTRNWA193WJZZ	3-T701			R
RTRNZA058WJZZ	3-T603	AD		R
RTUNQA037WJZZ	3-TU201			R
【 S 】				
SPAKCD591WJZZ	8-4	-		-
SPAKPA771WJZZ	8-7	-		-
SPAKXB002WJZZ	8-6	-		-
【 T 】				
TiNS-D209WJZZ	6-			R
TLABZB556WJZZ	8-5	-		-
【 U 】				
UBATU0247AJZZ	6-			R
【 V 】				
VB550AJAC1S1E	1-			R
VCCCCY1HH101JY	3-C1002	AA		R
VCCCCY1HH220JY	3-C1858	AA		R
〃	3-C1860	AA		R
VCCCCY1HH330JY	3-C801	AA		R
VCCCCY1HH471JY	3-C757	AA		R
VCCCCY1HH680JY	3-C836	AA		R
VCE9GA1HW475M+	3-C3001	AB		R
〃	3-C3005	AB		R
〃	3-C3010	AB		R
〃	3-C3012	AB		R
〃	3-C3016	AB		R
VCEA0A0JW477M+	3-C1022	AC		R
VCEA0A1AW107M+	3-C802	AB		R
〃	3-C1001	AB		R
VCEA0A1AW108M+	3-C202	AC		R
VCEA0A1AW477M+	3-C831	AC		R
VCEA0A1CW106M+	3-C383	AB		R
〃	3-C387	AB		R
〃	3-C827	AB		R
〃	3-C1003	AB		R
〃	3-C3006	AB		R
〃	3-C3019	AB		R
〃	3-C3021	AB		R
VCEA0A1CW226M+	3-C1840	AC		R
VCEA0A1CW227M+	3-C3009	AC		R
VCEA0A1CW336M+	3-C1868	AB		R
〃	4-C893	AB		R
VCEA0A1CW476M+	3-C806	AB		R
〃	3-C809	AB		R
〃	3-C818	AB		R
〃	3-C821	AB		R

PARTS CODE	No.	PRICE RANK	NEW MARK	PART RANK
〃	3-C1853	AB		R
VCEA0A1CW477M+	3-C451	AC		R
〃	3-C643	AC		R
〃	3-C838	AC		R
〃	3-C1841	AC		R
VCEA0A1EW108M+	3-C393	AD		R
VCEA0A1EW227M+	3-C610	AB		R
VCEA0A1EW228M+	3-C756	AE		R
VCEA0A1EW476M+	3-C642	AB		R
〃	3-C3044	AB		R
VCEA0A1EW477M+	3-C301	AB		R
VCEA0A1HW104M+	3-C310	AB		R
〃	3-C311	AB		R
〃	3-C833	AB		R
VCEA0A1HW105M+	3-C1018	AB		R
〃	3-C3004	AB		R
〃	3-C3018	AB		R
VCEA0A1HW106M+	3-C206	AB		R
VCEA0A1HW107M+	3-C505	AB		R
VCEA0A1HW224M+	3-C3034	AB		R
〃	3-C3039	AB		R
VCEA0A1HW225M+	3-C1006	AB		R
VCEA0A1HW335M+	3-C826	AB		R
〃	3-C3037	AB		R
〃	3-C3038	AB		R
〃	3-C3045	AB		R
〃	3-C3046	AB		R
VCEA0A1HW474M+	3-C804	AB		R
〃	3-C825	AB		R
VCEA0A1HW475M+	3-C304	AB		R
〃	3-C322	AB		R
〃	3-C602	AB		R
〃	3-C843	AB		R
〃	3-C3007	AB		R
〃	3-C3011	AB		R
VCEA0A1HW476M+	3-C719	AB		R
VCEA0A1VW477M+	3-C511	AB		R
VCEA0A2EW336M+	3-C604	AD		R
VCEA9M1HW474M+	3-C816	AB		R
〃	3-C828	AB		R
VCEACA1CC106K+	3-C3017			R
VCEACA1HC335J+	3-C515	AC		R
VCEACA1HC335K+	3-C3015	AC		R
VCFPVC2EC334J	3-C611	AD		R
VCFPVC3ZA802H	3-C607	AD		R
VCFYAA2AA224J+	3-C508	AD		R
VCFYFA1HA104J+	3-C811	AA		R
〃	3-C820	AA		R
〃	3-C832	AA		R
〃	3-C1081	AA		R
VCFYFA1HA105J+	3-C706	AE		R
VCFYFA1HA154J+	3-C501	AE		R
VCKYCY1CB563KY	3-C814	AB		R
VCKYCY1CF104ZY	3-C834	AB		R
VCKYCY1CF105ZY	3-C824	AB		R
〃	3-C840	AB		R
VCKYCY1CF474ZY	3-C1004	AB		R
VCKYCY1EF104ZY	3-C1016	AA		R
〃	3-C1021	AA		R
VCKYCY1HB102KY	3-C213	AA		R
〃	3-C308	AA		R
〃	3-C313	AA		R
〃	3-C1019	AA		R
VCKYCY1HB103KY	3-C803	AA		R
〃	3-C807	AA		R
〃	3-C815	AA		R
〃	3-C819	AA		R
〃	3-C830	AA		R
〃	3-C835	AA		R
〃	3-C841	AA		R
〃	3-C1013	AA		R
〃	3-C1842	AA		R
〃	3-C1852	AA		R
VCKYCY1HB104KY	3-C822	AA		R
〃	3-C823	AA		R
〃	3-C837	AA		R
〃	3-C842	AA		R
〃	3-R837	AA		R
〃	3-C1843	AA		R
VCKYCY1HB153KY	3-C805	AA		R

PARTS CODE	No.	PRICE RANK	NEW MARK	PART RANK
VCKYCY1HB221KY	3-C1017	AA		R
VCKYCY1HB272KY	3-C3013	AA		R
VCKYCY1HB561KY	3-C1020	AA		R
VCKYCY1HB562KY	3-C3002	AA		R
VCKYCY1HB681KY	3-C3042	AA		R
〃	3-C3043	AA		R
VCKYCY1HF103ZY	3-C203	AA		R
〃	3-C207	AA		R
〃	3-C208	AA		R
〃	3-C209	AA		R
〃	3-C210	AA		R
〃	3-C214	AA		R
〃	3-C810	AA		R
〃	3-C817	AA		R
〃	3-C839	AA		R
〃	3-C3008	AA		R
〃	3-C3023	AA		R
〃	3-C3024	AA		R
VCKYCY1HF473ZY	3-C3025	AA		R
〃	3-C3026	AA		R
VCKYCY1HF682ZY	3-C3031	AA		R
VCKYPA1HB102K+	3-C391	AA		R
VCKYPA1HB221K+	3-C708	AB		R
VCKYPA1HB271K+	4-C852	AB		R
VCKYPA1HB331K+	4-C853	AA		R
VCKYPA1HB471K+	3-C847	AA		R
VCKYPA1HB472K+	3-C711	AB		R
VCKYPA1HB561K+	4-C851	AA		R
VCKYPA2HB101K+	3-C650	AB		R
VCKYPA2HB102K+	3-C512	AA		R
〃	3-C606	AA		R
〃	3-C750	AA		R
VCKYPH3DB561K	3-C743	AC		R
〃	3-C752	AC		R
VCQYTA1HM103J+	3-C709	AB		R
〃	3-C710	AB		R
VCQYTA1HM123K+	3-C3003	AB		R
VCQYTA1HM473K+	3-C3014	AB		R
VCQYTA1HM563J+	3-C601	AB		R
VCQYTA1HM682K+	3-C3030	AB		R
VCQYTA2AA103K+	3-C608	AC		R
VHD1SS244//-1Y	3-D602	AB		R
VHDHSS4148+-1Y	3-D203	AA		R
〃	3-D204	AA		R
〃	3-D301	AA		R
〃	3-D801	AA		R
〃	3-D803	AA		R
〃	3-D810	AA		R
〃	3-D1005	AA		R
〃	3-D1008	AA		R
〃	3-D1094	AA		R
〃	3-D1801	AA		R
〃	4-D859	AA		R
〃	4-D898	AA		R
VHiAN17821A-1	3-iC301			R
VHiBR24L04F-1Y	3-iC1003	AE		R
VHiCXA2194Q-1S	3-iC3001			R
VHiLA78040N-1	3-iC501	AE		R
VHiPQ09RDA1-1	3-iC601	AF		R
VHiSTRW5453-1	3-iC701	AM		R
VP-CF100K0000Y	3-L802	AB		R
〃	3-L804	AB		R
VP-CF220K0000Y	3-L803	AB		R
VP-DF100K0000Y	3-L801	AB		R
〃	3-L807	AB		R
〃	3-L3501	AB		R
VP-DF270K0000Y	3-L203	AB		R
VP-MK820K0000+	4-L851	AB		R
VP-XF150K0000Y	3-L808	AB		R
VP-XF1R2K0000Y	3-L206	AB		R
VP-XF2R2K0000Y	3-L205	AB		R
VRD-RA2BE101JY	3-R462	AA		R
〃	3-R803	AA		R
〃	3-R805	AA		R
〃	3-R820	AA		R
〃	3-R1004	AA		R
〃	3-R1008	AA		R
〃	3-R1013	AA		R
〃	3-R1015	AA		R
〃	3-R1017	AA		R
〃	3-R1019	AA		R
VRD-RA2BE102JY	3-R301	AA		R

PARTS CODE	No.	PRICE RANK	NEW MARK	PART RANK
〃	3-R356	AA		R
〃	3-R615	AA		R
〃	3-R616	AA		R
〃	3-R661	AA		R
VRD-RA2BE103JY	3-R523	AA		R
〃	3-R524	AA		R
〃	3-R662	AA		R
〃	3-R1025	AA		R
VRD-RA2BE122JY	3-R525	AA		R
〃	3-R831	AA		R
VRD-RA2BE123JY	3-R809	AA		R
VRD-RA2BE153JY	3-R722	AA		R
VRD-RA2BE154JY	3-R614	AA		R
VRD-RA2BE181JY	3-R638	AA		R
VRD-RA2BE183JY	3-R1012	AA		R
VRD-RA2BE221JY	3-R704	AA		R
〃	3-R3001	AA		R
〃	3-R3002	AA		R
VRD-RA2BE273JY	3-R733	AA		R
VRD-RA2BE331JY	3-R637	AA		R
〃	3-R3026	AA		R
VRD-RA2BE332JY	3-R1016	AA		R
VRD-RA2BE391JY	3-R1028	AA		R
VRD-RA2BE392JY	3-R308	AA		R
〃	3-R314	AA		R
VRD-RA2BE393JY	3-R602	AA		R
〃	3-R603	AA		R
VRD-RA2BE470JY	4-R864	AA		R
VRD-RA2BE472JY	3-R376	AA		R
VRD-RA2BE473JY	3-R604	AA		R
VRD-RA2BE561JY	4-R895	AA		R
VRD-RA2BE683JY	3-R304	AA		R
VRD-RA2EE472JY	3-R720	AA		R
VRD-RA2EE750JY	3-R459	AA		R
VRD-RM2HD102JY	3-R608	AA		R
VRD-RM2HD104JY	3-R605	AA		R
VRD-RM2HD124JY	3-R753	AA		R
VRD-RM2HD151JY	3-R813	AA		R
VRD-RM2HD1R0JY	3-R507	AA		R
〃	3-R710	AA		R
VRD-RM2HD270JY	3-R601	AA		R
〃	3-R609	AA		R
〃	3-R612	AA		R
VRD-RM2HD271JY	3-R639	AA		R
VRD-RM2HD332JY	4-R880	AA		R
〃	4-R881	AA		R
〃	4-R882	AA		R
VRD-RM2HD333JY	3-R513	AA		R
VRD-RM2HD682JY	3-R514	AA		R
VRN-KT3LB1R8J	3-R302			R
VRN-RL2HC4R7J+	3-R621	AB		R
VRN-RL2HCR47J+	3-R726	AB		R
VRN-RL3AB1R8J+	3-R611	AB		R
VRN-RL3AB8R2J+	3-R754	AB		R
VRN-RL3DB1R0J+	3-R503	AB		R
〃	3-R642	AB		R
VRN-RL3DBR22J+	3-R706	AB		R
VRN-RL3DBR82J+	3-R705	AB		R
VRN-RL3LBR22J+	3-R606	AD		R
VRS-CY1JF000JY	3-RJ2	AA		R
〃	3-RJ5	AA		R
〃	3-RJ8	AA		R
〃	3-RJ12	AA		R
〃	3-RJ16	AA		R
〃	3-RJ19	AA		R
〃	3-RJ20	AA		R
〃	3-RJ24	AA		R
〃	3-C1012	AA		R
〃	3-C1846	AA		R
〃	3-C1847	AA		R
〃	3-C1849	AA		R
〃	3-R1087	AA		R
VRS-CY1JF101JY	3-R201	AA		R
〃	3-R202	AA		R
〃	3-R804	AA		R
〃	3-R808	AA		R
〃	3-R814	AA		R
〃	3-R815	AA		R
〃	3-R840	AA		R
〃	3-R1014	AA		R
〃	3-R1024	AA		R
〃	3-R1031	AA		R

PARTS CODE	No.	PRICE RANK	NEW MARK	PART RANK
〃	3-R1040	AA		R
VRS-CY1JF102JY	3-R353	AA		R
〃	3-R801	AA		R
〃	3-R819	AA		R
〃	3-R1003	AA		R
〃	3-R1039	AA		R
〃	3-R3011	AA		R
〃	3-R3012	AA		R
〃	3-R3018	AA		R
〃	3-R3021	AA		R
〃	3-R3033	AA		R
〃	3-R3036	AA		R
VRS-CY1JF103JY	3-R316	AA		R
〃	3-R373	AA		R
〃	3-R458	AA		R
〃	3-R520	AA		R
〃	3-R618	AA		R
〃	3-R810	AA		R
〃	3-R811	AA		R
〃	3-R835	AA		R
〃	3-R1018	AA		R
〃	3-R1030	AA		R
VRS-CY1JF104JY	3-R372	AA		R
〃	3-R374	AA		R
〃	3-R1010	AA		R
〃	3-R1027	AA		R
〃	3-R1045	AA		R
〃	3-R3004	AA		R
VRS-CY1JF105JY	3-R1041	AA		R
〃	3-R3003	AA		R
VRS-CY1JF121JY	4-R876	AA		R
〃	4-R877	AA		R
〃	4-R878	AA		R
VRS-CY1JF122JY	3-R206	AA		R
VRS-CY1JF123JY	3-R617	AA		R
VRS-CY1JF124JY	3-R807	AA		R
〃	3-R1802	AA		R
VRS-CY1JF152JY	4-R891	AA		R
〃	4-R894	AA		R
VRS-CY1JF181JY	3-R824	AA		R
〃	3-R826	AA		R
〃	3-R827	AA		R
VRS-CY1JF182JY	3-R822	AA		R
〃	3-R832	AA		R
〃	3-R833	AA		R
〃	3-R834	AA		R
〃	3-R3031	AA		R
〃	3-R3034	AA		R
VRS-CY1JF183JY	3-R1011	AA		R
〃	3-R1020	AA		R
〃	3-R1022	AA		R
〃	3-R1026	AA		R
VRS-CY1JF220JY	3-R818	AA		R
VRS-CY1JF221JY	3-R207	AA		R
〃	3-R220	AA		R
VRS-CY1JF222JY	3-R307	AA		R
〃	3-R315	AA		R
〃	3-R504	AA		R
〃	3-R843	AA		R
〃	3-R1801	AA		R
VRS-CY1JF223JY	3-R828	AA		R
〃	3-R3032	AA		R
〃	3-R3035	AA		R
VRS-CY1JF271JY	4-R849	AA		R
〃	4-R854	AA		R
〃	4-R855	AA		R
VRS-CY1JF274JY	3-R305	AA		R
VRS-CY1JF302JY	3-R3008	AA		R
VRS-CY1JF331JY	3-R208	AA		R
〃	3-R817	AA		R
VRS-CY1JF332JY	3-R204	AA		R
〃	3-R362	AA		R
〃	3-R366	AA		R
〃	3-R1032	AA		R
〃	3-R1056	AA		R
〃	3-R1074	AA		R
〃	3-R3007	AA		R
VRS-CY1JF391JY	4-R892	AA		R
VRS-CY1JF392JY	3-R209	AA		R
〃	3-R3010	AA		R
〃	3-R3027	AA		R
〃	3-R3029	AA		R

PARTS CODE	No.	PRICE RANK	NEW MARK	PART RANK
VRS-CY1JF470JY	3-R841	AA		R
〃	4-R850	AA		R
〃	4-R851	AA		R
〃	4-R852	AA		R
VRS-CY1JF471JY	3-R816	AA		R
〃	3-R1042	AA		R
VRS-CY1JF472JY	3-R823	AA		R
〃	3-R838	AA		R
〃	3-R1046	AA		R
〃	3-R1092	AA		R
VRS-CY1JF473JY	3-R303	AA		R
〃	3-R802	AA		R
〃	3-R825	AA		R
〃	3-R829	AA		R
〃	3-R1044	AA		R
〃	3-R1894	AA		R
〃	3-R1895	AA		R
〃	3-R1896	AA		R
VRS-CY1JF475JY	3-R1803	AA		R
VRS-CY1JF562JY	3-R1038	AA		R
VRS-CY1JF623JY	3-R3005	AA		R
VRS-CY1JF680JY	3-R205	AA		R
VRS-CY1JF683JY	3-R3028	AA		R
〃	3-R3030	AA		R
VRS-CY1JF750JY	3-R461	AA		R
VRS-CY1JF822JY	3-R806	AA		R
〃	3-R812	AA		R
〃	3-R1021	AA		R
VRS-RG3AB331J+	3-R506	AB		R
VRS-RG3DB121J+	3-R755	AB		R
VRS-RG3LB391J+	3-R631			R
VRS-RG3LB393J+	3-R216	AC		R
VRS-VV3DB124J	3-R702	AA		R
VRS-VV3DB153J	4-R859	AA		R
〃	4-R861	AA		R
〃	4-R863	AA		R
VRS-VV3DB682J	3-R622	AA		R
VS2SA1530AR-1Y	3-Q802	AB		R
〃	3-Q805	AB		R
〃	4-Q894	AB		R
VS2SC2235Y/1E+	3-Q601	AE		R
VS2SC2735//1EY	3-Q201			R
VS2SC3198-G-1+	3-Q603	AA		R
VS2SC3928AR-1Y	3-Q350	AB		R
〃	3-Q351	AB		R
〃	3-Q604	AB		R
〃	3-Q801	AB		R
〃	3-Q803	AB		R
〃	3-Q1001	AB		R
〃	3-Q1002	AB		R
〃	3-Q1801	AB		R
〃	3-Q3001	AB		R
〃	3-Q3002	AB		R
〃	3-Q3004	AB		R
〃	3-Q3005	AB		R
VS2SD468-C/-1+	3-Q751	AD		R
〃	3-Q752	AD		R
〃	3-Q753	AD		R
〃	3-Q754	AD		R
VSP9050PA02WA	5-SP301	AH		R
VSTT2140+++-F	3-Q602	AG		R

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